



The image shows a Samsung SyncMaster 460Pn/460P monitor on the left. To its right is a software interface with a blue background. At the top right of the interface is a dropdown menu labeled "Select Model Name". Below this is a list of menu items: Safety Instructions, Introduction, Setup, Adjusting Your Monitor, Troubleshooting, Specifications, and Information. At the bottom right of the interface are icons for Regulatory, Manual, and Adobe Reader. At the bottom left of the interface are icons for MagicBright, Natural Color, MDC, and MagicNet. A row of seven colored circles (purple, blue, light blue) is positioned between the bottom icons and the main interface area.

**Install Programs**

▶▶ **MDC System**

▶▶  Natural Color

▶▶  MagicNet

# SyncMaster 460Pn/460P



### Notational

Please read the following safety instructions as they are designed to prevent damage to property and harm to the user.

#### Warning / Caution



Failure to follow directions noted by this symbol could result in bodily harm or damage to equipment.

#### Notational Conventions



Prohibited



Important to read and understand at all times



Do not disassemble



Disconnect the plug from the outlet



Do not touch



Grounding to prevent an electric shock

### Power



When not used for an extended period of time, set your computer to DPMS. If using a screen saver, set it to the active screen mode.

[Shortcut to Anti-Afterimage Instructions](#)

Do not use a damaged or loose plug.



- This may cause an electric shock or fire.



**Do not pull the plug out by the wire nor touch the plug with wet hands.**

- This may cause an electric shock or fire.



**Use only a properly grounded plug and receptacle.**

- An improper ground may cause electric shock or equipment damage.



**Insert the power plug firmly so that it does not come loose.**

- A bad connection may cause fire.



**Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.**

- This may cause an electric shock or fire.



**Do not connect too many extension cords or plugs to an outlet.**

- This may cause fire.

Notational

Power

**Installation**

Clean

Others

**Installation**



Be sure to contact an authorized Service Center, when installing your monitor in a location with the heavy dust, high or low temperatures, high humidity, chemical substance and where it operates for 24 hours such as the airport, the train station or etc.

Failure to do so may cause a serious damage to your monitor.



**Put your monitor in a location with low humidity and a minimum of dust.**

- Failure to do so may cause an electric shock or fire inside the monitor.

**Do not drop the monitor when moving it.**



- This may cause damage to the product or human body.



- **Install the monitor base in a showcase or shelf so that the end of the base does not protrude from the showcase or shelf.**

- Dropping the product may cause damage to the product or personal injury.



- **Do not place the product on an unstable or small surface area.**

- Place the product on an even, stable surface, as the product may fall and cause harm to someone walking by, specifically children.



- **Do not place the product on the floor.**

- Someone, specifically children could trip over it.



- **Keep any flammable objects such as candles, insecticides or cigarettes away from the product.**

- Otherwise, this may cause a fire.



- **Keep any heating devices away from the power cable.**

- A melted coating may lead to electric shock or fire.



- **Do not install the product in places with poor ventilation, for instance, a bookshelf, closet, etc.**

- Any increase in internal temperature may cause fire.



- **Set down the monitor carefully.**

- The monitor could be damaged or broken.



- **Do not place the monitor face down.**

- The TFT-LCD surface may be damaged.



**Installing a wall bracket must be done by a qualified professional.**

- Installation by unqualified personnel may result in injury.
- Always use the mounting device specified in the owner's manual.



**When installing the product, make sure to keep it away from the wall (more than 10cm/4inch ) for ventilation purposes.**

- Poor ventilation may cause an increase in the internal temperature of the product, resulting in a shortened component life and degraded performance.

Notational

Power

Installation

**Clean**

Others

**Clean**



When cleaning the monitor case or the surface of the TFT-LCD screen, wipe with a slightly moistened, soft fabric.



**Do not spray water or detergent directly on the monitor.**

- This may cause damage, electric shock or fire.



**Use the recommended detergent with a smooth cloth.**



**If the connector between the plug and the pin is dusty or dirty, clean it properly with a dry cloth.**

- A dirty connector may cause an electric shock or fire.



**Make sure to unplug the power cord before cleaning the product.**

- Otherwise, this may cause electric shock or fire.



**Unplug the power cord from the power outlet and wipe the product using a soft, dry cloth.**

- Do not use any chemicals such as wax, benzene, alcohol, thinners, insecticide, air freshener, lubricant or detergent.



☑ **Contact the [Service Center](#) or [Customer Center](#) for interior cleaning once a year.**

- Keep the product's interior clean. Dust which has accumulated in the interior over an extended period of time may cause malfunction or fire.

Notational

Power

Installation

Clean

Others

## ☑ Others



☑ **Do not remove cover (or back).**

- This may cause an electric shock or fire.
- Refer servicing to qualified service personnel.



☑ **If your monitor does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service.**

- This may cause an electric shock or fire.



☑ **Keep the product away from places exposed to oil, smoke or moisture; do not install inside a vehicle.**

- This may cause malfunction, an electric shock or fire.
- Especially avoid operating the monitor near water or outdoors where it could be exposed to snow or rain.



☑ **If the monitor is dropped or the casing is damaged, turn the monitor off and unplug the power cord. Then contact the [Service Center](#) .**

- The monitor may malfunction, causing an electric shock or fire.



☑ **Disconnect the plug from the outlet during storms or lightning or if it is not used for a long period of time.**

- Failure to do so may cause an electric shock or fire.



☑ **Do not try to move the monitor by pulling only the wire or the signal cable.**

- This may cause a breakdown, electric shock or fire due to damage to the cable.



☑ **Do not move the monitor right or left by pulling only the wire or the signal cable.**

- This may cause a breakdown, electric shock or fire due to damage to the cable.



**Do not cover the vents on the monitor cabinet.**

- Bad ventilation may cause a breakdown or fire.



**Do not place water containers, chemical products or small metal objects on the monitor.**

- This may cause malfunction, an electric shock or fire.
- If a foreign substance enters the monitor, unplug the power cord and contact [the Service Center](#).



**Keep the product away from combustible chemical sprays or inflammable substances.**

- This may cause an explosion or fire.



**Never insert anything metallic into the monitor openings.**

- This may cause an electric shock, fire or injury.



**Do not insert metal objects such as chopsticks, wire and gimlet or inflammable objects such as paper and match into the vent, headphone port or AV ports.**

- It may cause a fire or an electric shock. If an alien substances or water flows into the product, turn the product off, unplug the power connector from the wall outlet and contact [Service Center](#).



**If you view a fixed screen for an extended period of time, residual image or blurriness may appear.**

- Change the mode to energy save or set a screensaver to moving picture when you need to be away from the monitor for an extended period of time.



**Adjust the resolution and frequency to the levels appropriate for the model.**

- Inappropriate resolution may cause undesirable picture quality.

46 inch - 1360 X 768



**Watching the monitor continuously at a too close angle may result in eyesight damage.**



**To ease eye strain, take at least a five-minute break after every hour of using the monitor.**





❗ **Do not install the product on an unstable, uneven surface or a location prone to vibrations.**

- Dropping the product may cause damage to the product or personal injury. Using the product in a location prone to vibrations may shorten the lifetime of the product or may catch fire.



❗ **When moving the monitor, turn off and unplug the power cord. Make sure that all cables, including the antenna cable and cables connecting to other devices, are disconnected before moving the monitor.**

- Failure to disconnect cables may damage it and lead to fire or an electric shock.



❗ **Make sure there are more than two people when moving the product.**

- Dropping the product may cause a malfunction or physical damage.



❗ **Place the product out of children's reach, as they could damage it by hanging onto it.**

- A falling product could cause physical damage even death.



❗ **When not using the product for an extended time period, keep the product unplugged.**

- Otherwise, this may cause heat emission from the accumulated dirt or degraded insulation, leading to electric shock or fire.



❗ **Do not place children's favorite objects (or anything else that may be tempting) on the product.**

- Children may try to climb on the product to retrieve an object. The product could fall, causing physical damage or even death.



❗ **When you remove batteries from the remote, be careful that they are not swallowed by children. Keep batteries out of the reach of children.**

- If swallowed, see a doctor immediately.



❗ **When replacing batteries, place the batteries in the correct +/- polarity position as indicated on battery holder.**

- Incorrect polarity may cause a battery to break or leak and could lead to fire, injury, or contamination (damage).



❗ **Use only specified standard batteries. Do not use new and used batteries together.**

- This may cause a battery to break or leak and could lead to fire, injury, or contamination (damage).



❗ **The battery (and rechargeable battery) are not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable battery for recycling purposes as the consumer of the battery.**

- The customer can return the used or rechargeable battery to a nearby



public recycling center or to a store selling the same type of the battery or rechargeable battery.

---



# SyncMaster 460Pn



## Unpacking

Front

Rear

Remote Control

Mechanical Lay-out:

Please make sure the following items are included with your monitor.  
If any items are missing, [contact your dealer](#).  
[Contact a local dealer](#) to buy optional items.



This stand is not for the Floor Standing Type.



## Unpacking



Monitor

## Manual



Quick Setup Guide



Warranty Card  
(Not available in all locations)



User's Guide, MDC software,  
Natural Color software,  
MagicNet software

## Cable



D-Sub Cable



Power Cord



Speaker Wire Cable

---

Sold separately



Wall Mount KIT



Speaker Set



Stand KIT



DVI Cable



LAN Cable

---

Others



Remote Control



Batteries (AAA X 2)



Cover-Hole

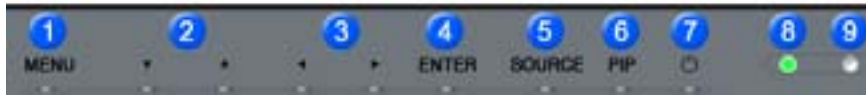


BNC to RCA  
Adapter Jack



Semi Stand

Front



- |  |                          |
|--|--------------------------|
| 1. MENU  | 6. PIP                   |
| 2. Navigate button (Up-Down button)                    | 7. Power button          |
| 3. Adjust button (Left-Right button)/<br>Volume button | 8. Power indicator       |
| 4. ENTER   | 9. Remote Control Sensor |
| 5. SOURCE  |                          |

**1. MENU**

Use this button to open the on-screen menu and exit from the menu screen or close screen adjustment menu.

**2. Navigate buttons (Up-Down button)**

Moves from one menu item to another vertically or adjusts selected menu values.

**3. Adjust buttons (Left-Right button) / Volume buttons**

Moves from one menu item to another horizontally or adjusts selected menu values. Adjusts the audio volume.

**4. ENTER**

Activates a highlighted menu item.

**5. SOURCE**

Switches from PC mode to Video mode.

Changing the source is allowed in external devices that are connected to the monitor at the time.

To switch Screen modes:

[PC] → [BNC] → [DVI] → [AV] → [S-VIDEO] → [Component] → [MagicNet]  
>>Click here to see an animation clip

**6. PIP**

Push the PIP button to turn PIP screen On/Off.

More than one PIP couldn't be overlapped on screen as BNC and the component use the same terminal.

>>Click here to see an animation clip

**• PC / DVI**

: AV / S-Video / Component Mode

**• BNC**

: AV / S-Video Mode

**• AV / S-Video**

: PC / BNC / DVI Mode

**• Component**

: PC / DVI Mode

**7. Power button**

Use this button to turn the monitor on and off.

**8. Power indicator**

Power Indicator shows PowerSaver mode by green blinking.

**9. Remote Control Sensor**

Aim the remote control towards this spot on the Monitor.



See [PowerSaver](#) described in the manual for further information regarding power saving functions. For energy conservation, turn your monitor OFF when it is not needed or when leaving it unattended

for long periods.

Unpacking

Front

Rear

Remote Control

Mechanical Lay-out:

## Rear



For detailed information concerning cable connections, refer to [Connecting Cables](#) under Setup. The monitor's rear configuration may vary slightly depending on the monitor model.



1. **POWER SW** : Switch the monitor on and off.
2. **POWER IN** : Power cord, plug into monitor and wall receptacle.



3. **RS232C OUT/IN (RS232C Serial PORT)**: MDC(Multiple Display Control) Program Port
4. **DVI IN(HDCP) (PC Video Connection Terminal)**  
: Using DVI Cable (DVI-D to DVI-D) - DVI mode (Digital PC)
5. **PC IN(RGB) (PC Video Connection Terminal)**  
: Using D-Sub Cable (15 pin D-Sub) - PC mode (Analog PC)
6. **PC/DVI/BNC AUDIO IN (PC/DVI/BNC Audio Connection Terminal (Input))**



7. **COMPONENT AUDIO IN [L-AUDIO-R](Component Audio Connection Terminal (Input))**
8. **BNC/COMPONENT OUT (BNC/Component Connection Terminal (Output))**
  - BNC (Analog PC) Connection : connecting R, G, B, H, V port
  - Component Connection : connecting PR, Y, PBport
9. **BNC/COMPONENT IN (BNC/Component Connection Terminal (Input))**



10. **AV AUDIO IN [L-AUDIO-R](Monitor Audio Connection Terminal (Input))**
11. **AV OUT [VIDEO](VIDEO Connection Terminal) : AV mode (Output)**
12. **AV IN [VIDEO](VIDEO Connection Terminal) (Input)**
13. **AV OUT [S-VIDEO](S-Video Connection Terminal) : S-Video mode (Output)**
14. **AV IN [S-VIDEO](S-Video Connection Terminal) (Input)**
15. **EXT SPEAKER(8 Ω) (EXT Speaker Connection Terminal)**
16. **MONITOR OUT [L-AUDIO-R](Monitor Audio Connection Terminal (Output))**
  - MONITOR OUT is the terminal for sound output of PC, DVI or BNC.



The number of monitors that can be connected to loopout may be different under the circumstance such as cable, signal source, etc.  
With a cable which there is no degradation or signal source ten monitors can be connected.



- 17. **LAN (LAN Connection Terminal)**  
(MS Internet Explorer)
- 18. **USB (USB Connection Terminal)**  
(Keyboard / Mouse, Mass Storage Device Compatible.)
- 19. **DIGITAL AUDIO OUT (Digital Audio Connection Terminal)**



**20. Kensington Lock**

The Kensington lock is a device used to physically fix the system when using it in a public place.  
(The locking device has to be purchased separately. )

**For using a locking device, contact where you purchase it.**

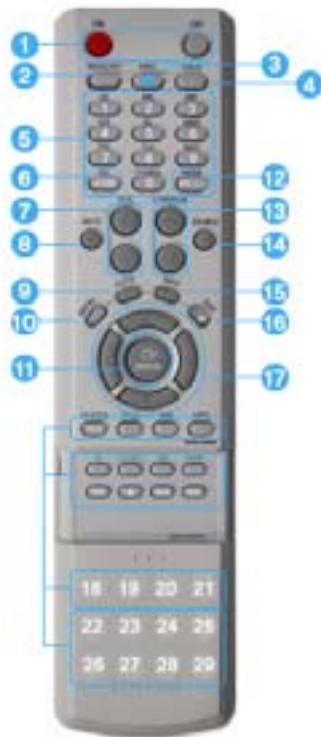


See [Connecting the Monitor](#) for further information regarding cable connections.

**C Remote Control**

The performance of the remote control may be affected by a TV or other electronic devices operated near the monitor, causing malfunction due to interference with frequency.





1. ON / OFF
  2. MAGICNET
  3. MDC
  4. LOCK
  5. MagicNet buttons
  6. +100
  7. VOL
  8. MUTE
  9. AUTO
  10. MENU
  11. ENTER
  12. PRE-CH
  13. CH/PAGE
  14. SOURCE
  15. INFO
  16. EXIT
  17. Up-Down Left-Right buttons
  18. P.MODE (M/B)
  19. STILL
  20. BBE
  21. MTS
  22. PIP
  23. SOURCE
  24. SIZE
  25. SWAP
  26. 
  27. 
  28. 
  29. 
-  MagicNet Remote Control

#### 1. ON / OFF

Use these buttons to turn the monitor on or off.

#### 2. MAGICNET

MagicNet Quick Launch Button.

#### 3. MDC

MDC Quick Launch Button.

#### 4. LOCK

This button will activate or deactivate all function keys on both the remote control and the monitor except for the Power and LOCK buttons.

#### 5. MagicNet buttons

- Used for MagicNet.

- Alphanumeric: Used to enter the Internet address.
- DEL : Functions as the backspace.
- SYMBOL : Used to enter the symbols. (.O\_ -:/)
- ENTER : Used to enter values.

#### 6. +100

Press to select channels over 100.

For example, to select channel 121, press "+100", then press "2" and "1".

- This function does not work for this monitor.

#### 7. VOL

Adjusts the audio volume.

>>[Click here to see an animation clip](#)

#### 8. MUTE

Pauses (mutes) the audio output temporarily.

Displayed on the lower left corner of the screen.

The audio resumes if MUTE or - VOL + is pressed in the Mute mode.

#### 9. AUTO

Adjusts the screen display automatically.

If you change resolution in the control panel, auto function will be executed.

#### 10. MENU

Use this button to open the on-screen menu and exit from the menu screen or close screen adjustment menu.

#### 11. ENTER

Activate a highlighted menu item.

#### 12. PRE-CH

This button is used to return to the immediately previous channel.

- This function does not work for this monitor.

#### 13. CH/PAGE

Selects channels or page.

- This function does not work for this monitor.

#### 14. SOURCE

Push this button to change video sources.

#### 15. INFO

Current picture information displays on the upper left corner of the screen.

#### 16. EXIT

Exits from the menu screen.

#### 17. Up-Down Left-Right buttons

Moves from one menu item to another horizontally, vertically or adjusts selected menu values.

#### 18. P.MODE (M/B)

When you press this button, current picture mode is displayed on the lower center of the screen.

##### AV / S-Video / Component : P.MODE

The Monitor has four automatic picture settings that are preset at the factory.

Then push button again to circle through available preconfigured modes.

( Dynamic → Standard → Movie → Custom )

##### PC/DVI/BNC : M/B (MagicBright™)

MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching.

Then push button again to circle through available preconfigured modes.

( Entertain → Internet → Text → Custom )

#### 19. STILL

When you press this button, STILL is displayed on the lower center of the screen.

Press the button once to freeze the screen.

Press it again to unfreeze.

#### 20. BBE

Recreates the natural sound and improves sound clarity through boosting high and low range frequencies. As a result high sounds are clearer, brilliant and finely detailed while low sounds are tight, well-defined and harmonically rich.

## 21. MTS

You can select the MTS (Multichannel Television Stereo) mode.

	Audio Type	MTS/S_Mode	Default
FM Stereo	Mono	Mono	Manual Change
	Stereo	Mono ↔ Stereo	
	SAP	Mono ↔ SAP	Mono

- This function does not work for this monitor.

## 22. PIP

Every time you push the button, a PIP screen appears.

## 23. SOURCE

The PIP window's signal source changes.

## 24. SIZE

You can switch the Picture Size.

## 25. SWAP

Swapping the contents of the PIP and main image.

The image in the PIP window will appear on the main screen, and the main screen image will appear in the PIP window.

## 26. ⏮

Rewind

## 27. ■

Stop

## 28. ⏸

Play/Pause

## 29. ⏭

Fast forward

## + Remote Control

### PHOTO

- When the files are selected in the library list



Previous file



Stop slideshow / View the bottom menu bar



Slideshow



Next file

- When you see no menu in a zoomed-in picture



Move up to the top of the image



Move down to the bottom of the image



Move to the left of the image



Move to the right of the image

### MUSIC

- When the files are selected in the library list



File view on the cursor position /  
Play / Pause during playback



Stop playing



Play in 5 seconds



Play 5 seconds earlier



Move to the next page (when the cursor is placed at the  
top, it will go back to the last file of the previous page)



Move to the previous page (when the cursor is placed at the bottom, it will move to the first file of the next page)



Move to the next page (when the current page is the first, it will move to the last page)



Move to the previous page (when the current page is the last, it will move to the first page)



File view on the cursor position Play

## MOVIE

- When the files are selected in the library list



Move to the top (when the cursor is placed at the top, it will go back to the last file of the previous page)



Move to the bottom (when the cursor is placed at the bottom, it will move to the first file of the next page)



Move to the next page (when the current page is the first, it will move to the last page)



Move to the previous page (when the current page is the last, it will move to the first page)



File view on the cursor position Play

- Play



Play / Pause during playback



Stop playing



Play 5 seconds earlier



Play in 5 seconds

## OFFICE

- When the files are selected in the library list



Move to the top (when the cursor is placed at the top, it will go back to the last file of the previous page)



Move to the bottom (when the cursor is placed at the bottom, it will move to the first file of the next page)



Move to the next page (when the current page is the first, it will move to the last page)



Move to the previous page (when the current page is the last, it will move to the first page)



File view on the cursor position

• PDF



Move to the top



Move to the bottom



Move to the next page



Move to the previous page



Exit PDF

• Excel



Move to the upper cell



Move to the lower cell



Move to the left cell



Move to the right cell



Move to the next page



Move to the previous page



Move to the right sheet



Move to the left sheet



Exit Excel

• Power point Normal



Move to the top



Move to the previous page



Move to the next page



Move to the previous page



Slideshow



Exit Power point

---

• Power point Slideshow



Stop slideshow



Move to the top



Move to the bottom



Move to the next page



Move to the previous page



Exit Power point

---

• Word



Move to the top



Move to the bottom



Move to the next page



Move to the previous page



Exit Word

---

• HTML / Internet



Move the mouse cursor up



Move the mouse cursor down



Move the mouse cursor to the left



Move the mouse cursor to the right





Click when the cursor is placed over a link (move to the link)

---



Exit the Internet

---



Unpacking

Front

Rear

Remote Control

Mechanical Lay-out:

Please make sure the following items are included with your monitor.  
If any items are missing, [contact your dealer](#).  
[Contact a local dealer](#) to buy optional items.



This stand is not for the Floor Standing Type.



Unpacking



Monitor

Manual



Quick Setup Guide



Warranty Card  
(Not available in all locations)



User's Guide, MDC software,  
Natural Color software

Cable



D-Sub Cable



Power Cord



Speaker Wire Cable

---

Sold separately



Wall Mount KIT



Speaker Set



Stand KIT



DVI Cable

---

Others



Remote Control



Batteries (AAA X 2)



Cover-Hole

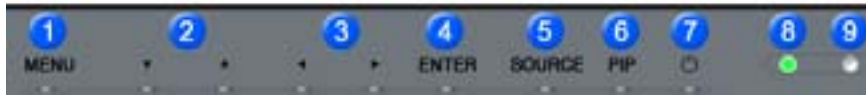


BNC to RCA  
Adapter Jack



Semi Stand

Front



- |  |                          |
|--|--------------------------|
| 1. MENU  | 6. PIP                   |
| 2. Navigate button (Up-Down button)                    | 7. Power button          |
| 3. Adjust button (Left-Right button)/<br>Volume button | 8. Power indicator       |
| 4. ENTER   | 9. Remote Control Sensor |
| 5. SOURCE  |                          |

**1. MENU**

Use this button to open the on-screen menu and exit from the menu screen or close screen adjustment menu.

**2. Navigate buttons (Up-Down button)**

Moves from one menu item to another vertically or adjusts selected menu values.

**3. Adjust buttons (Left-Right button) / Volume buttons**

Moves from one menu item to another horizontally or adjusts selected menu values. Adjusts the audio volume.

**4. ENTER**

Activates a highlighted menu item.

**5. SOURCE**

Switches from PC mode to Video mode.

Changing the source is allowed in external devices that are connected to the monitor at the time.

To switch Screen modes:

[PC] → [BNC] → [DVI] → [AV] → [S-VIDEO] → [Component]

>>Click here to see an animation clip

**6. PIP**

Push the PIP button to turn PIP screen On/Off.

More than one PIP couldn't be overlapped on screen as BNC and the component use the same terminal.

>>Click here to see an animation clip

**• PC / DVI**

: AV / S-Video / Component Mode

**• BNC**

: AV / S-Video Mode

**• AV / S-Video**

: PC / BNC / DVI Mode

**• Component**

: PC / DVI Mode

**7. Power button**

Use this button to turn the monitor on and off.

**8. Power indicator**

Power Indicator shows PowerSaver mode by green blinking.

**9. Remote Control Sensor**

Aim the remote control towards this spot on the Monitor.



See [PowerSaver](#) described in the manual for further information regarding power saving functions. For energy conservation, turn your monitor OFF when it is not needed or when leaving it unattended

for long periods.

Unpacking

Front

Rear

Remote Control

Mechanical Lay-out:

## Rear



For detailed information concerning cable connections, refer to [Connecting Cables](#) under Setup. The monitor's rear configuration may vary slightly depending on the monitor model.



1. **POWER SW** : Switch the monitor on and off.
2. **POWER IN** : Power cord, plug into monitor and wall receptacle.



3. **RS232C OUT/IN (RS232C Serial PORT)**: MDC(Multiple Display Control) Program Port
4. **DVI IN(HDCP) (PC Video Connection Terminal)**  
: Using DVI Cable (DVI-D to DVI-D) - DVI mode (Digital PC)
5. **PC IN(RGB) (PC Video Connection Terminal)**  
: Using D-Sub Cable (15 pin D-Sub) - PC mode (Analog PC)
6. **PC/DVI/BNC AUDIO IN (PC/DVI/BNC Audio Connection Terminal (Input))**



7. **COMPONENT AUDIO IN [L-AUDIO-R](Component Audio Connection Terminal (Input))**
8. **BNC/COMPONENT OUT (BNC/Component Connection Terminal (Output))**  
 - BNC (Analog PC) Connection : connecting R, G, B, H, V port  
 - Component Connection : connecting P<sub>R</sub>, Y, P<sub>B</sub>port
9. **BNC/COMPONENT IN (BNC/Component Connection Terminal (Input))**



10. **AV AUDIO IN [L-AUDIO-R](Monitor Audio Connection Terminal (Input))**
11. **AV OUT [VIDEO](VIDEO Connection Terminal) : AV mode (Output)**
12. **AV IN [VIDEO](VIDEO Connection Terminal) (Input)**
13. **AV OUT [S-VIDEO](S-Video Connection Terminal) : S-Video mode (Output)**
14. **AV IN [S-VIDEO](S-Video Connection Terminal) (Input)**
15. **EXT SPEAKER(8 Ω) (EXT Speaker Connection Terminal)**
16. **MONITOR OUT [L-AUDIO-R](Monitor Audio Connection Terminal (Output))**  
 - MONITOR OUT is the terminal for sound output of PC, DVI or BNC.



The number of monitors that can be connected to loopout may be different under the circumstance such as cable, signal source, etc.

With a cable which there is no degradation or signal source ten monitors can be connected.



#### 17. Kensington Lock

The Kensington lock is a device used to physically fix the system when using it in a public place.

(The locking device has to be purchased separately. )

**For using a locking device, contact where you purchase it.**



See [Connecting the Monitor](#) for further information regarding cable connections.

Unpacking

Front

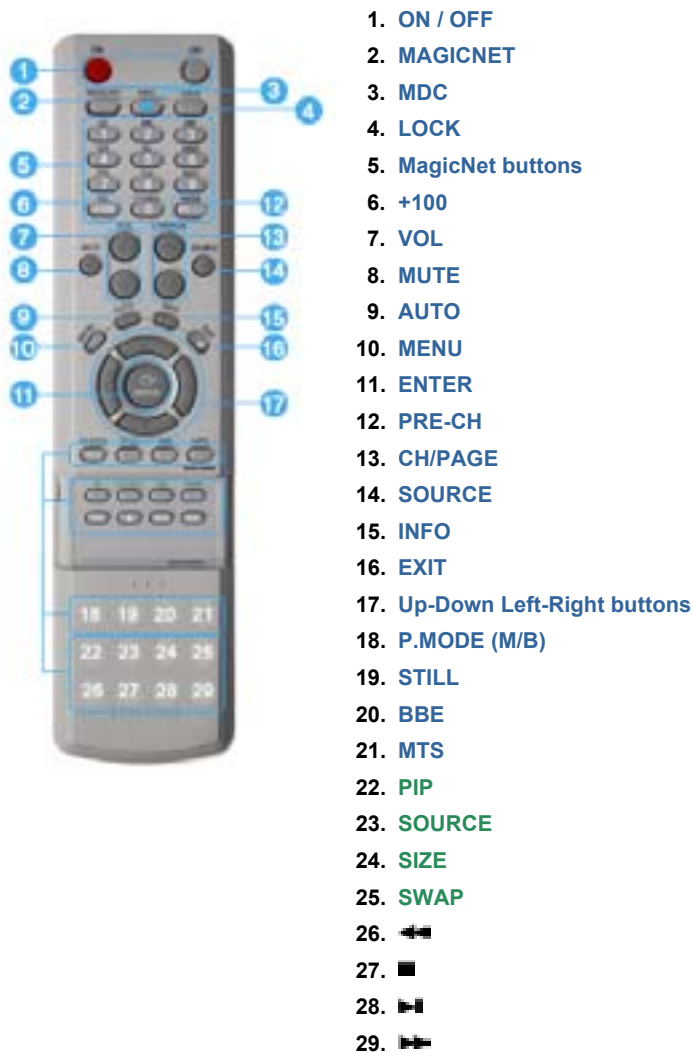
Rear

Remote Control

Mechanical Lay-out:

## Remote Control

The performance of the remote control may be affected by a TV or other electronic devices operated near the monitor, causing malfunction due to interference with frequency.



### 1. ON / OFF

Use these buttons to turn the monitor on or off.



## 2. MAGICNET

MagicNet Quick Launch Button.

- **This function does not work for this monitor.**

## 3. MDC

MDC Quick Launch Button.

## 4. LOCK

This button will activate or deactivate all function keys on both the remote control and the monitor except for the Power and LOCK buttons.

## 5. MagicNet buttons

- Used for MagicNet.

- Alphanumeric: Used to enter the Internet address.
- DEL : Functions as the backspace.
- SYMBOL : Used to enter the symbols. (.O\_:/)
- ENTER : Used to enter values.

- **This function does not work for this monitor.**

## 6. +100

Press to select channels over 100.

For example, to select channel 121, press "+100", then press "2" and "1".

- **This function does not work for this monitor.**

## 7. VOL

Adjusts the audio volume.

>>[Click here to see an animation clip](#)

## 8. MUTE

Pauses (mutes) the audio output temporarily.

Displayed on the lower left corner of the screen.

The audio resumes if MUTE or - VOL + is pressed in the Mute mode.

## 9. AUTO

Adjusts the screen display automatically.

If you change resolution in the control panel, auto function will be executed.

## 10. MENU

Use this button to open the on-screen menu and exit from the menu screen or close screen adjustment menu.

## 11. ENTER

Activate a highlighted menu item.

## 12. PRE-CH

This button is used to return to the immediately previous channel.

- **This function does not work for this monitor.**

## 13. CH/PAGE

Selects channels or page.

- **This function does not work for this monitor.**

## 14. SOURCE

Push this button to change video sources.

## 15. INFO

Current picture information displays on the upper left corner of the screen.

## 16. EXIT

Exits from the menu screen.

### 17. Up-Down Left-Right buttons

Moves from one menu item to another horizontally, vertically or adjusts selected menu values.

### 18. P.MODE (M/B)

When you press this button, current picture mode is displayed on the lower center of the screen.

#### AV / S-Video / Component : P.MODE

The Monitor has four automatic picture settings that are preset at the factory.

Then push button again to circle through available preconfigured modes.

( Dynamic → Standard → Movie → Custom )

#### PC/DVI/BNC : M/B (MagicBright™)

MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching.

Then push button again to circle through available preconfigured modes.

(Entertain → Internet → Text → Custom )

### 19. STILL

When you press this button, STILL is displayed on the lower center of the screen.

Press the button once to freeze the screen.

Press it again to unfreeze.

### 20. BBE

Recreates the natural sound and improves sound clarity through boosting high and low range frequencies. As a result high sounds are clearer, brilliant and finely detailed while low sounds are tight, well-defined and harmonically rich.

### 21. MTS

You can select the MTS (Multichannel Television Stereo) mode.

	Audio Type	MTS/S_Mode	Default
FM Stereo	Mono	Mono	Manual Change
	Stereo	Mono ↔ Stereo	
	SAP	Mono ↔ SAP	Mono

- This function does not work for this monitor.

### 22. PIP

Every time you push the button, a PIP screen appears.

### 23. SOURCE

The PIP window's signal source changes.

### 24. SIZE

You can switch the Picture Size.

### 25. SWAP

Swapping the contents of the PIP and main image.

The image in the PIP window will appear on the main screen, and the main screen image will appear in the PIP window.

### 26. ⏮

Rewind

### 27. ■

Stop

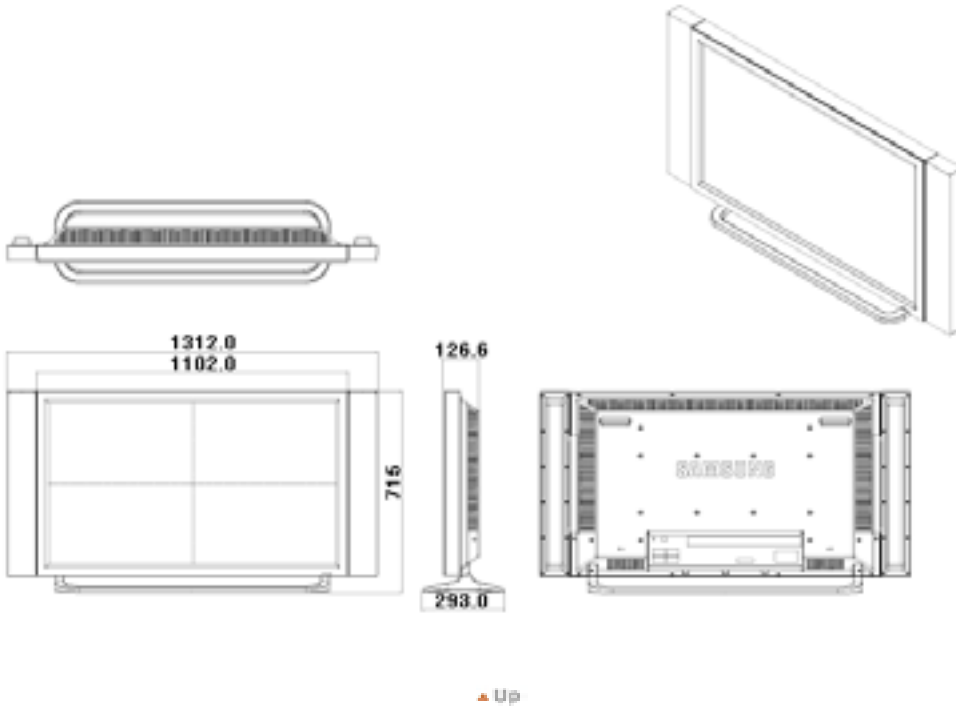
### 28. ⏸

Play/Pause

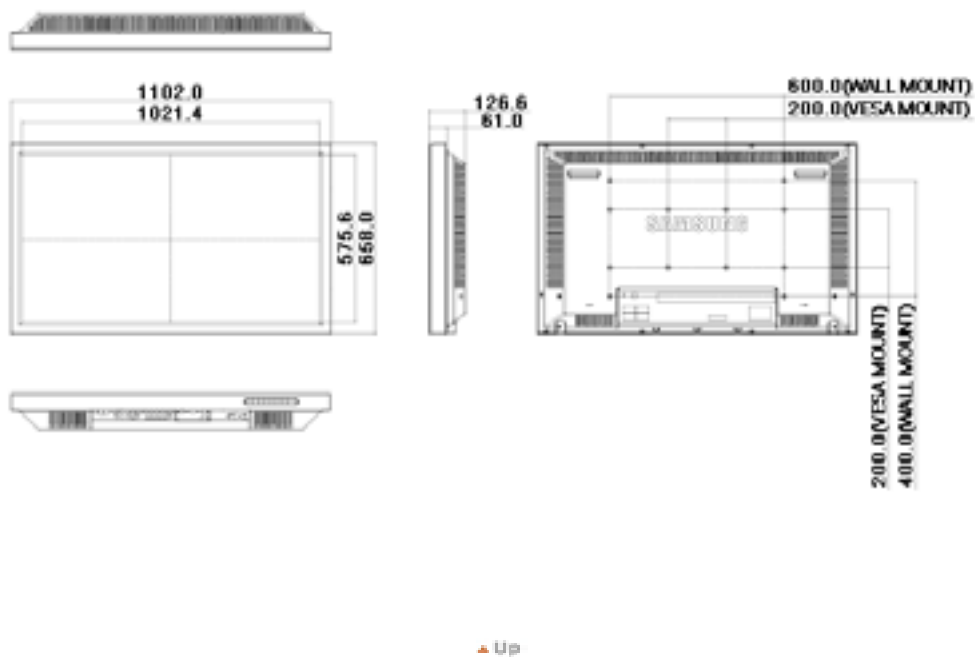
### 29. ⏭

Fast forward

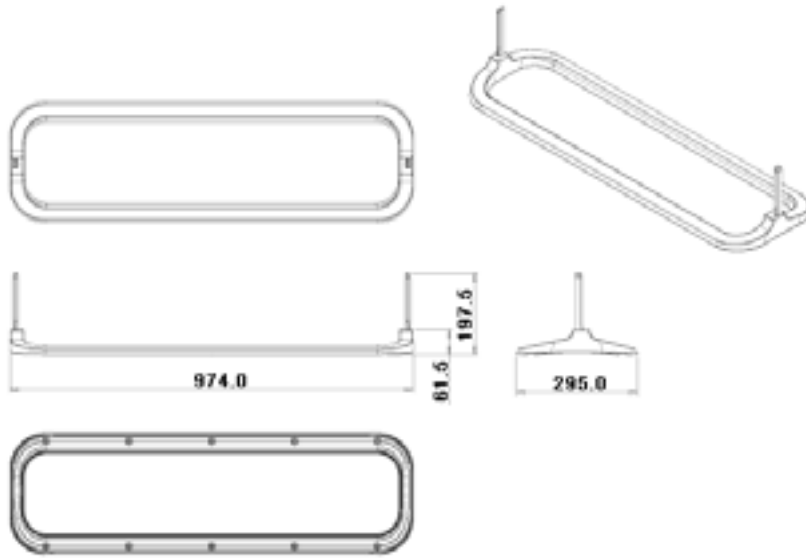
## 1. Mechanical Lay-out



## 2. Monitor Head

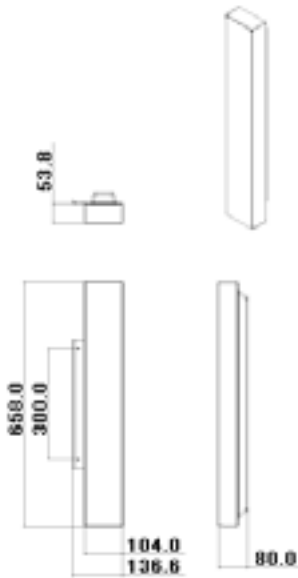


### 3. Stand



▲ Up

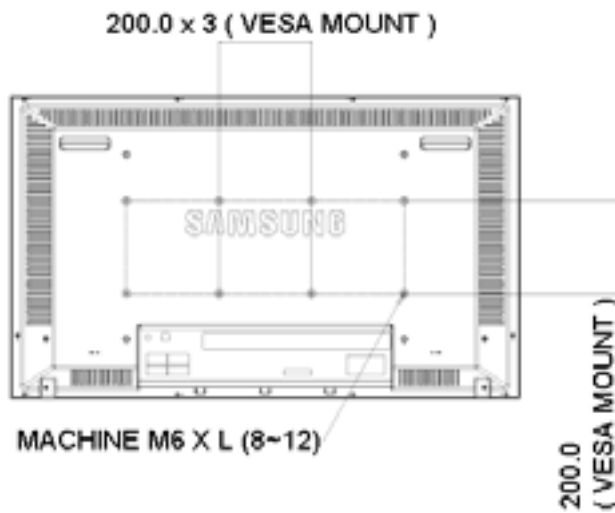
### 4. Speaker



▲ Up

### 5. Installation VESA Bracket

- When installing VESA, make sure to comply with the international VESA standards.
- Purchasing VESA Bracket and Installation Information : Please contact your nearest Samsung Distributor to place an order. After your order is placed, installation professionals will visit you and install the bracket.
- At least 2 persons are needed in order to move the LCD Monitor.
- Samsung is not responsible for any product damage or any injury caused by installation at customer's discretion.



For securing the bracket on a wall, use only machine screws of 6 mm diameter and 8 to 12 mm length.



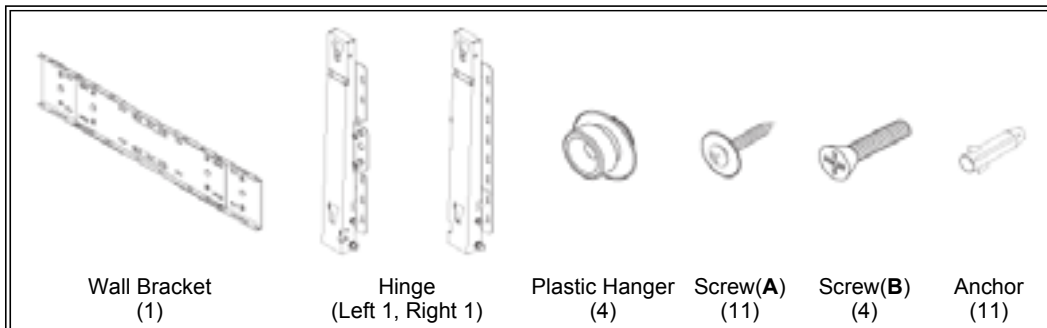
## 6. Wall Bracket Installation

- Contact a technician for installing the wall bracket.
- Samsung Electronics is not responsible for any damages to the product or harm to customers when the installation is done by the customer.
- This product is for installing on cement walls. The product may not stay in place when installed on plaster or wood.



### Components

Only use the components and accessories shipped with the product.

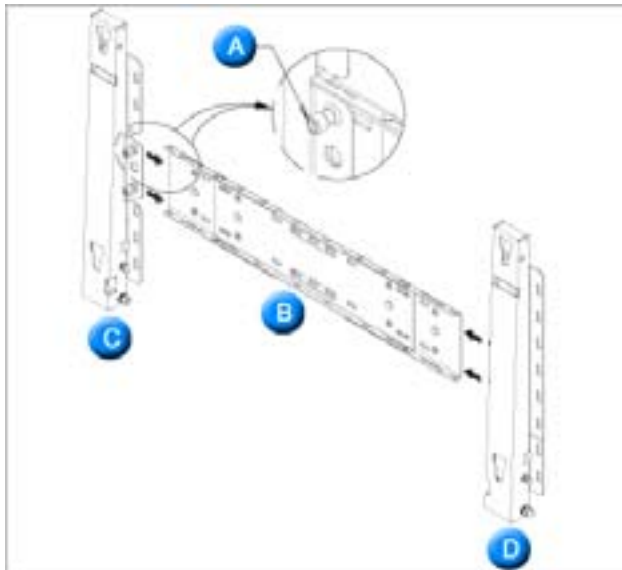


### Wall Bracket Assembly

1

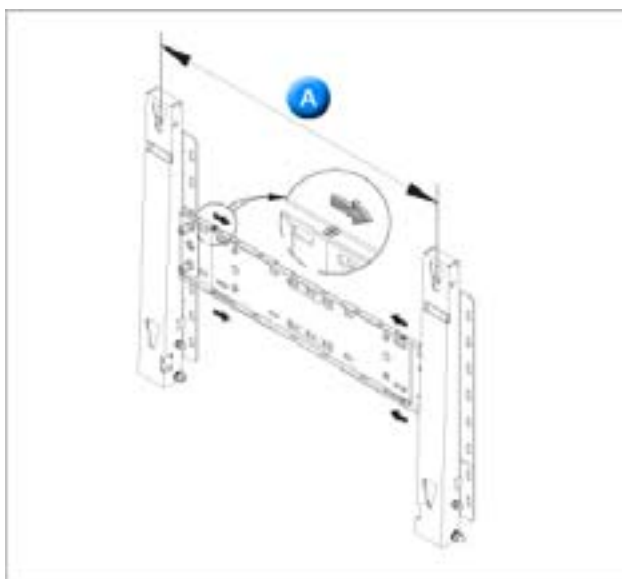
Insert and tighten the Captive Screw in the direction of the arrow.  
When done, mount the wall bracket on the wall.

- A. Captive Screw
- B. Wall Bracket
- C. Hinge (Left)
- D. Hinge (Right)



There are two hinges(left and right). Use the correct one.

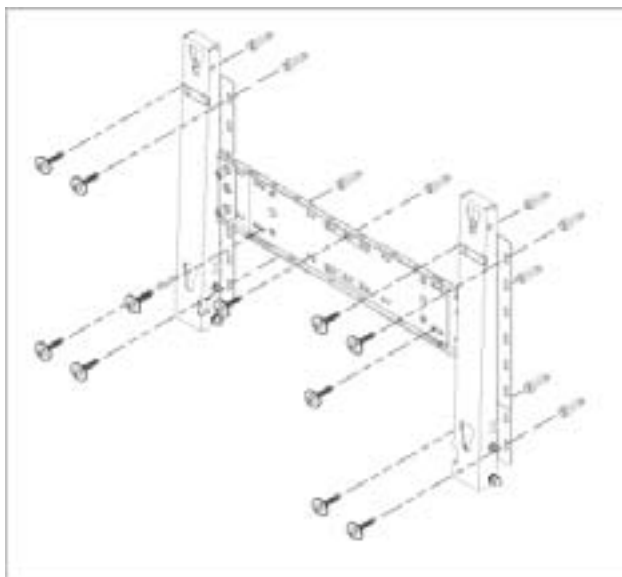
2



Before drilling into the wall, check if the length between the two locking holes at the back of the product is correct. If the length is too short or long, loosen all or some of the 4 screws on the wall bracket to adjust the length.

A. Length between the two locking holes

3

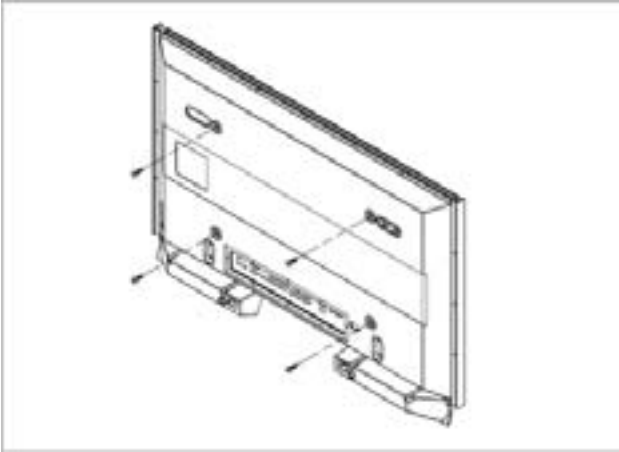


Check the installation diagram and mark the drill points on the wall. Use the 5.0 mm bit to drill holes deeper than 35 mm. Fix each anchor in the corresponding hole. Match each of the brackets and hinge holes to the corresponding anchor holes and insert and tighten the 11 screws **A**.

## To mount the product on the wall bracket

The shape of the product may vary depending on the model. (The assemblies of the plastic hanger and the screw are the same)

1



Remove the 4 screws on the back of the product.

2

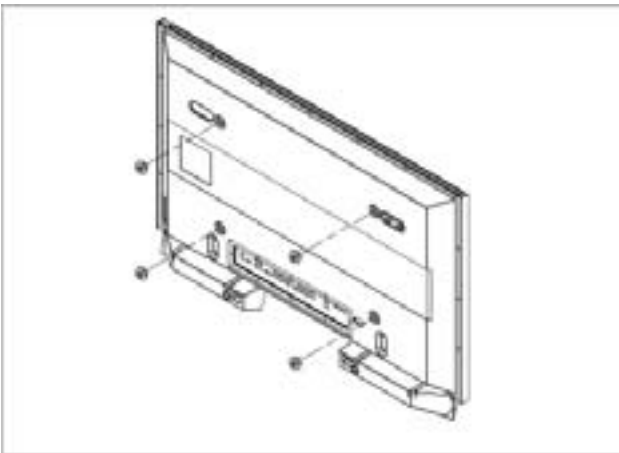


Insert the screw **B** into the plastic hanger.



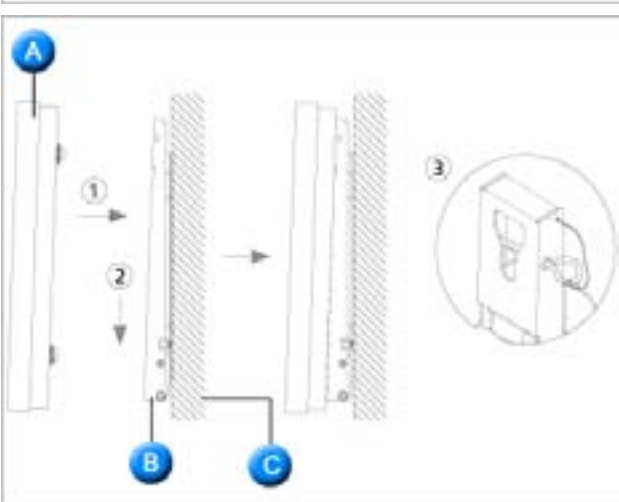
1. Mount the product on the wall bracket and make sure it is properly fixed to the left and right plastic hangers.
2. Be careful when installing the product on the bracket as fingers can be caught in the holes.
3. Make sure the wall bracket is securely fixed to the wall, or the product may not stay in place after installation.

3



Tighten the 4 screws in step 2 (plastic hanger + screw **B**) to the rear holes of the product.

4

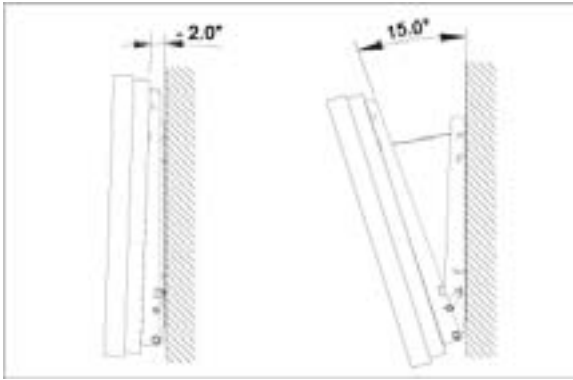


Remove safety pin (3) and insert the 4 product holders into the corresponding bracket holes (1). Then place the product(2) so that it is firmly fixed to the bracket. Make sure to re-insert and tighten the safety pin (3) to securely hold the product to the bracket.

- A. Monitor
- B. Wall Bracket
- C. Wall

## Wall Bracket Angle Adjustment

Adjust the bracket angle to -2° before installing it on the wall.



1. Fix the product to the wall bracket.
2. Hold the product at the top in the center and pull it forward (direction of the arrow) to adjust the angle.
3. You can adjust the bracket angle between  $-2^{\circ}$  and  $15^{\circ}$ .



Make sure to use the top center, and not the left or the right side of the product to adjust the angle.





## Installing Stand Kit

Connecting the Monitor

MDC

Natural Color

MagiNet

### Installing Stand Kit



Only the supplied bolts should be used.



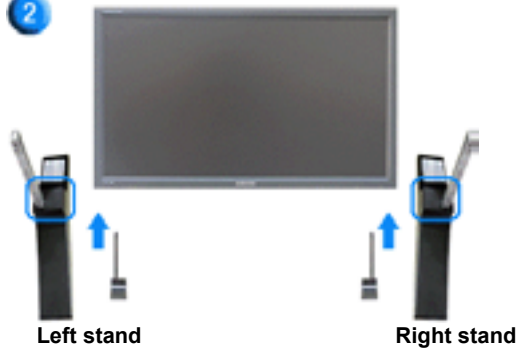
Samsung Electronics will not be responsible for damages caused by using a base other than those specified.

### 1. Installing the Semi Stand

1



2



Make sure to install the stand with Caution label folded backward.

3



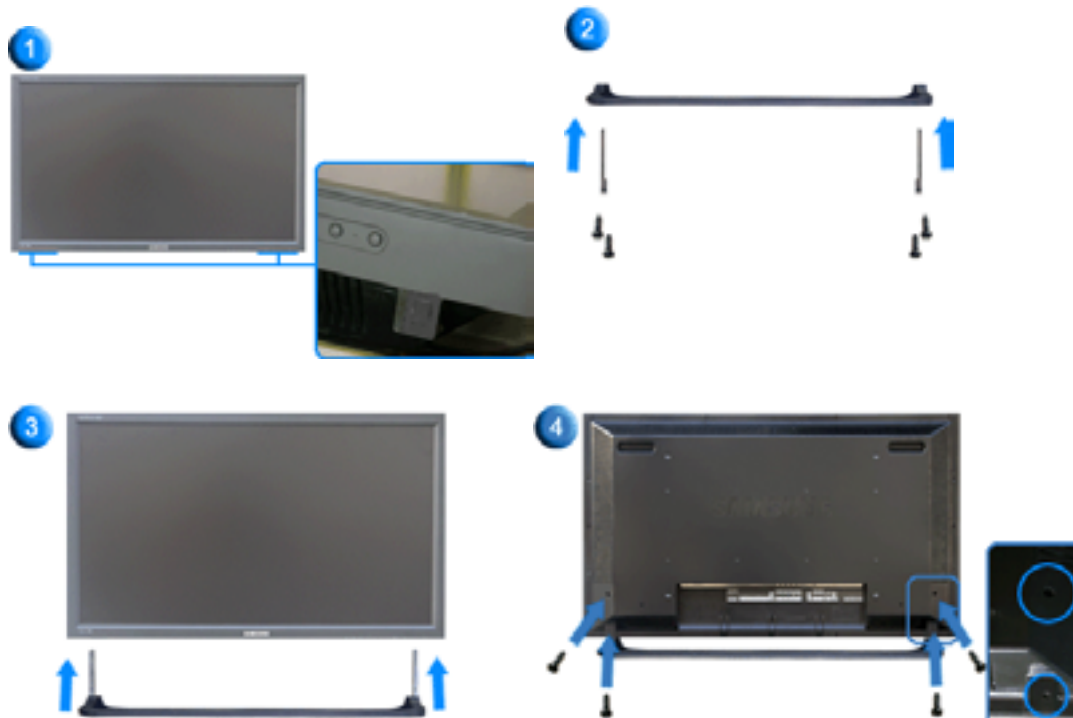
1. A 'Cover-Protector' is used to protect the hole at the bottom of the monitor, where the stand is inserted. Be sure to remove the 'Cover-Protector' when attaching the provided Semi Stand or stand kit (sold separately) and cover the hole using the 'Cover-Hole' when attaching the wall mount kit.

2. Set up the left and right stands respectively.
3. Put the stand into the hole at the bottom of the monitor.  
Insert screw into the hole indicated and tighten. (M4 × L15)



This stand is originally designed for the adjustment of the screen angle. And the company is not responsible for any problem caused by any use of this stand. Do never use the product as a stand on which something is placed.

## 2. Installing Stand Kit (sold separately)



1. A 'Cover-Protector' is used to protect the hole at the bottom of the monitor, where the stand is inserted. Be sure to remove the 'Cover-Protector' when attaching the provided Semi Stand or stand kit (sold separately) and cover the hole using the 'Cover-Hole' when attaching the wall mount kit.
2. Make sure you put the parts in the right direction and in the right place. (M4 × L15)
3. Put the stand into the hole at the bottom of the monitor.
4. Insert screw into the hole indicated and tighten. (M4 × L15)

Installing Stand Kit

Connecting the Monitor

MDC

Natural Color

MagicNet

### In case of Power cord with Earth

In the event of failure, earth lead may cause electric shock. Make sure to wire the earth lead in an appropriate manner, before plug-in the AC power. Or, when un-wire the earth lead, make sure to plug-off the AC power in advance.



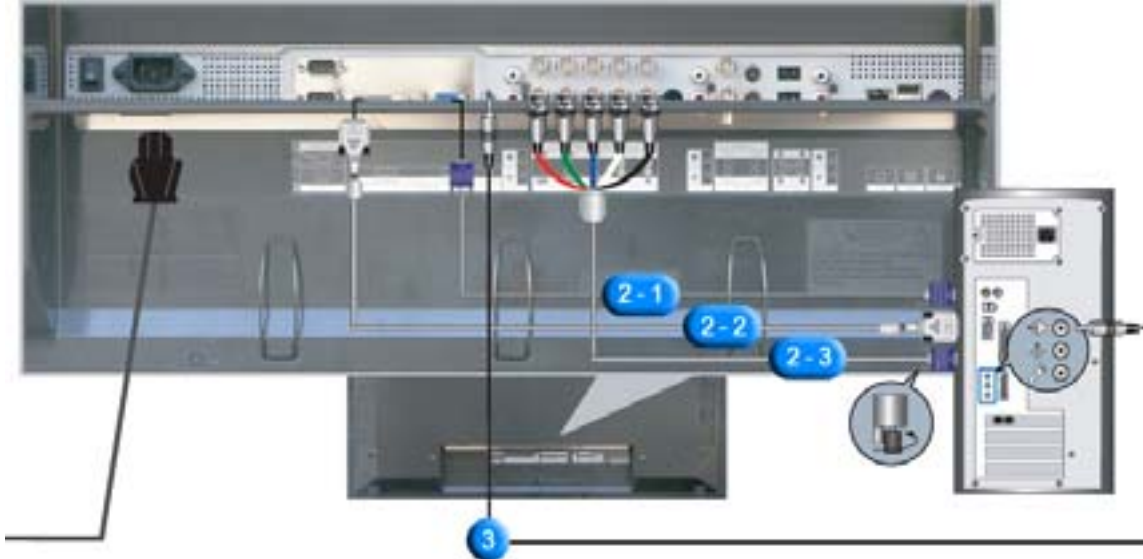
AV input devices like DVDs, VCRs or Camcorders as well as your computer may be connected to the monitor. For detailed information on connecting AV input devices, refer to User Controls under



## Adjusting Your Monitor.

[Connecting to a Computer](#) | [Connecting to a VCR](#) | [Connecting to a DVD Player](#) | [Connecting a Camcorder](#)  
[Connecting DTV Set Top Box](#) | [Connecting Speakers](#) | [Connecting to an Audio System](#)  
[Connecting the LAN Cable](#) | [Connecting USB](#) | [Connecting the Digital Audio System](#)

### 1. Connecting to a Computer



1. Connect the power cord for your monitor to the power port on the back of the monitor. Turn on power switch.
2. There are 3 ways to connect the signal cable to your monitor. Choose one of the followings :
  - 2-1. Using the D-sub (Analog) connector on the video card.  
Connect the signal cable to the 15-pin, RGB port on the back of your monitor.

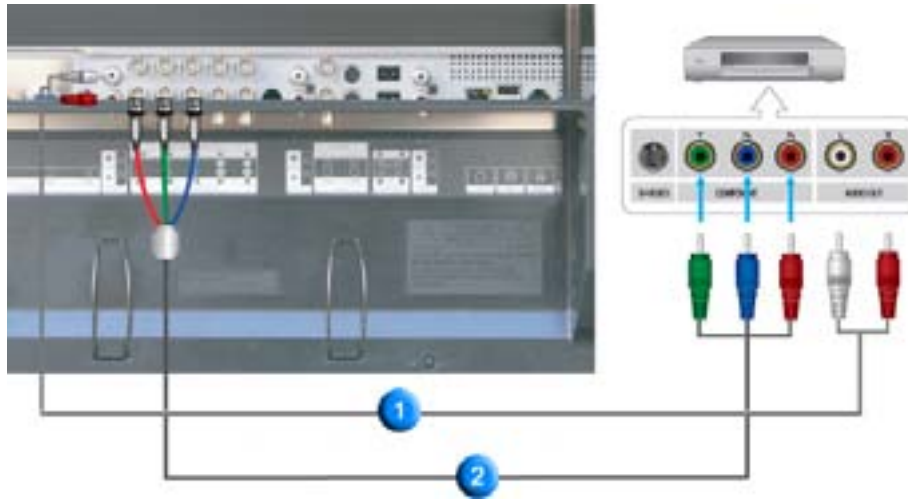


- 2-2. Using the DVI (Digital) connector on the video card.  
Connect the DVI Cable to the DVI(HDCP) port on the back of your monitor.



- 2-3. Using the BNC (Analog) connector on the video card.  
Connect the BNC Cable to the **BNC/COMPONENT IN - R, G, B, H, V port** on the back of your Monitor and the **15 pin D-sub Port** on the computer.





1. Connect a set of audio cables between the **COMPONENT AUDIO IN [L-AUDIO-R]** on the Monitor and the **AUDIO OUT** jacks on the DVD player.
2. Connect a Component cable between the **BNC/COMPONENT IN - Pr, Y, Pb** port on the Monitor and the **Pr, Y, Pb** jacks on the DVD player.



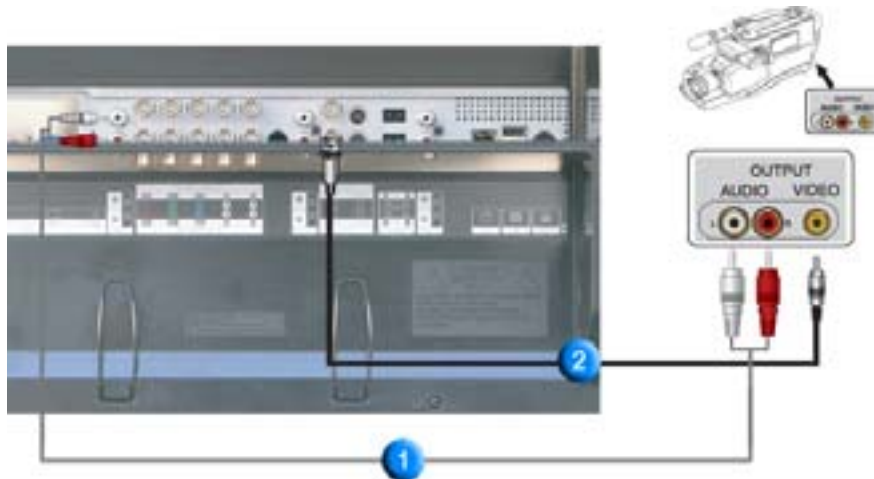
Component cable is optional.

3. Select **Component** that is connected to a DVD player using the Source button on the monitor's front or remote control.
4. Then, start the DVD Player with a DVD disc inserted.



For an explanation of Component video, see your DVD player owner's manual.

#### 4. Connecting a Camcorder



1. Locate the A/V output jacks on the camcorder. They are usually found on the side or back of the camcorder.  
Connect a set of audio cables between the **AUDIO OUTPUT** jacks on the camcorder and the **COMPONENT AUDIO IN [L-AUDIO-R]** on the Monitor.
2. Connect a video cable between the **VIDEO OUTPUT** jack on the camcorder and the **AV IN [VIDEO]** on the Monitor.
3. Select **AV** that is connected to a Camcorder using the Source button on the monitor's front or remote control.
4. Then, start the Camcorders with a tape inserted.



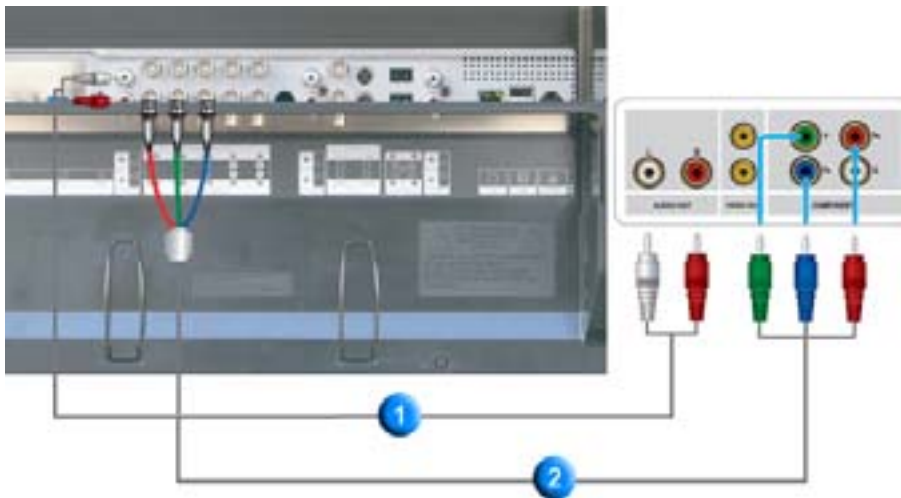
The audio-video cables shown here are usually included with a Camcorder.  
(If not, check your local electronics store.)  
If your camcorder is stereo, you need to connect a set of two cables.

---

## 5. Connecting DTV Set Top Box



The connections for a typical Set Top Box are shown below.



1. Connect a set of audio cables between the **COMPONENT AUDIO IN [L-AUDIO-R]** on the Monitor and the **AUDIO OUT** jacks on the Set Top Box.
2. Connect a Component cable between the **BNC/COMPONENT IN - Pr, Y, Pb port** on the Monitor and the **Pr, Y, Pb** jacks on the Set Top Box.
3. Select **Component** that is connected to a DTV Set Top Box using the Source button on the monitor's front or remote control.



For an explanation of Component video, see your Set Top Box owner's manual.

---

## 6. Connecting Speakers

1. Tighten the SET and the speaker using the screws.



\* Mount the set of the speaker without the speaker stand.

2. Connect the speaker connection cable between the speaker connection jack on the rear of the SET and the speaker connection jack on the rear of the speaker.

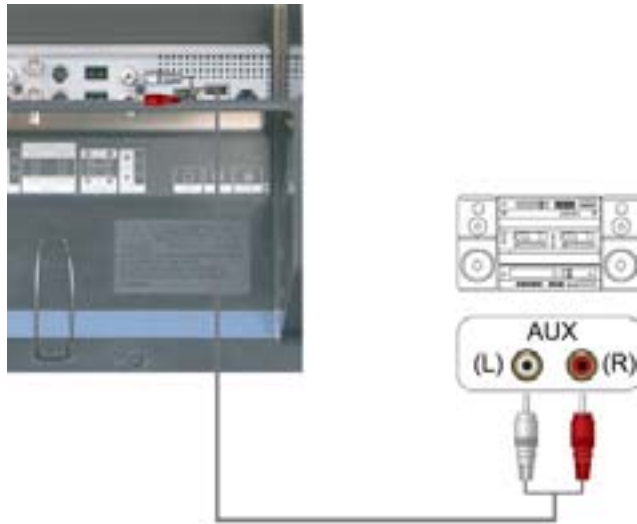


Do not move the SET holding the speaker when the SET is connected to the speaker. The speaker-bracket for connecting the SET speaker may be damaged.

---

## 7. Connecting to an Audio System

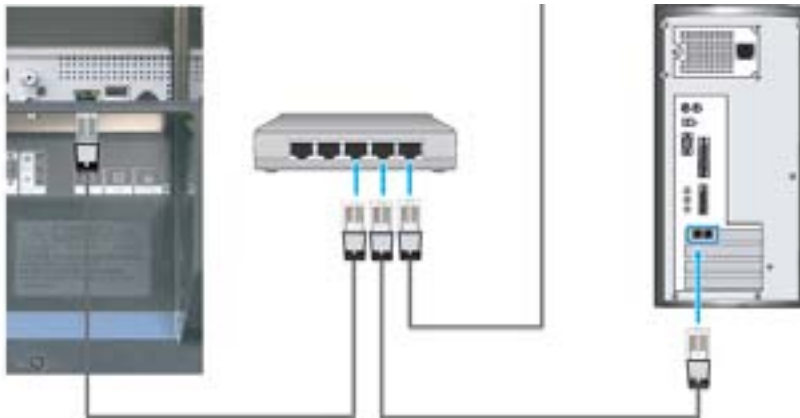




1. Connect a set of audio cables between the AUX L, R jacks on the AUDIO SYSTEM and the **MONITOR OUT [L-AUDIO-R]** on the Monitor.

---

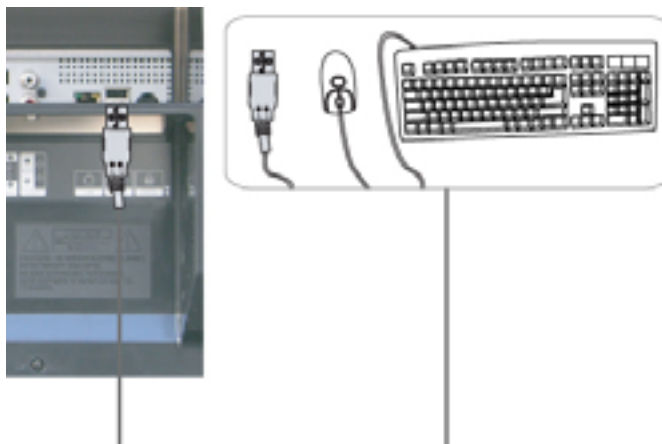
### 8. Connecting the LAN Cable



1. Connect the LAN cable.

---

### 9. Connecting USB



1. You can connect to USB devices such as a mouse or keyboard.

---

### 10. Connecting the Digital Audio System



1. Connect a set of digital audio cables between the Digital Audio Input jacks on the DIGITAL AUDIO SYSTEM and the **DIGITAL AUDIO OUT** on the Monitor.

---

Installing Stand Kit

Connecting the Monitor

**MDC**

Natural Color

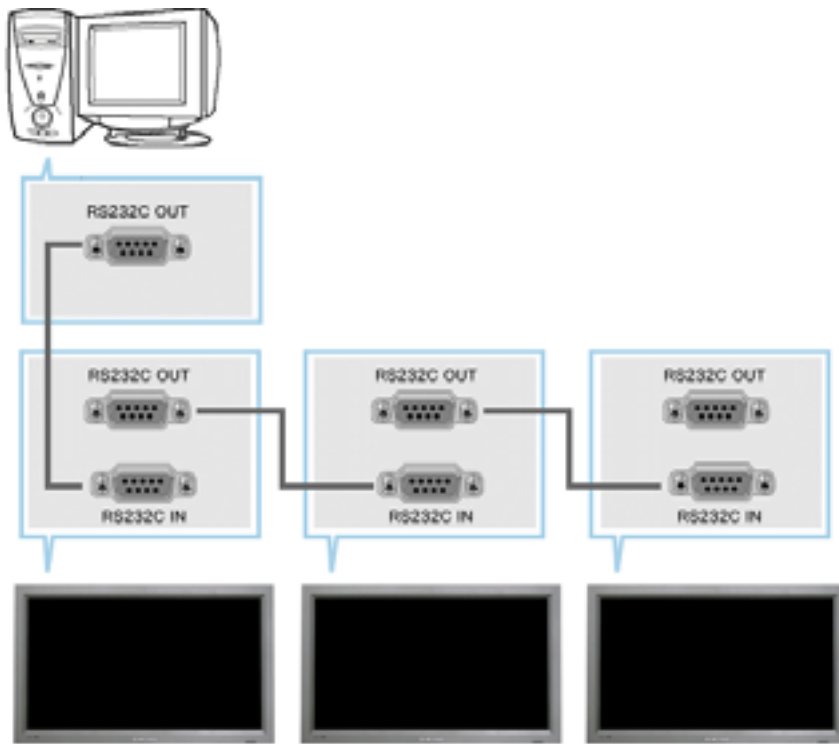
## Multiple Display Control **MDC System**

1. Introduction
2. Beginning :  
Main Screen | Port Setting |
3. Power Control
4. Input Source Control
5. Image Size Control :  
PC, BNC, DVI |  
AV, S-Video, Component, DVI(HDCP)

6. Time Control
7. PIP Control :  
PIP Size | PIP Source
8. Settings Control :  
Picture | Picture PC | Audio | Image Lock |
9. Maintenance Control - Lamp Control
10. Maintenance Control - Scroll
11. Maintenance Control - Video Wall
12. Troubleshooting
13. Settings Value Display In Multiple Display Mode

### **1. Introduction**



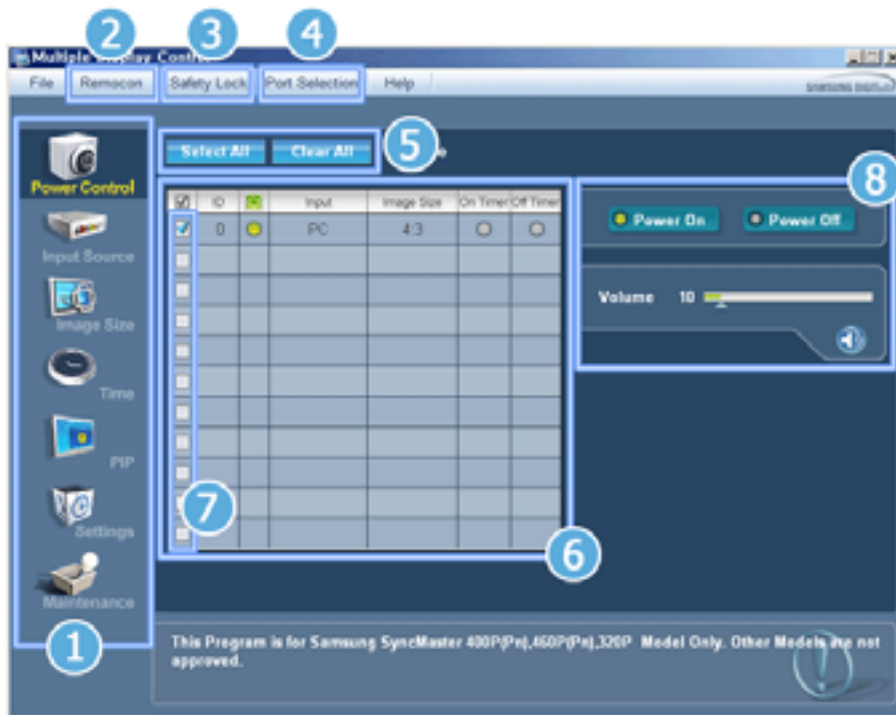


A Multiple Display Control (MDC) is an application allowing various displays to be easily and simultaneously operated on a PC. RS-232C, a standard of serial communication, is used for the communication between a PC and a display. Therefore, a serial cable should be connected between the serial port on a PC and the serial port on a display.

---

## 2. Main Screen

- Click Start > Program > Multiple Display Control to start the program.
- Select a set to see the volume of the selected set within the slider.



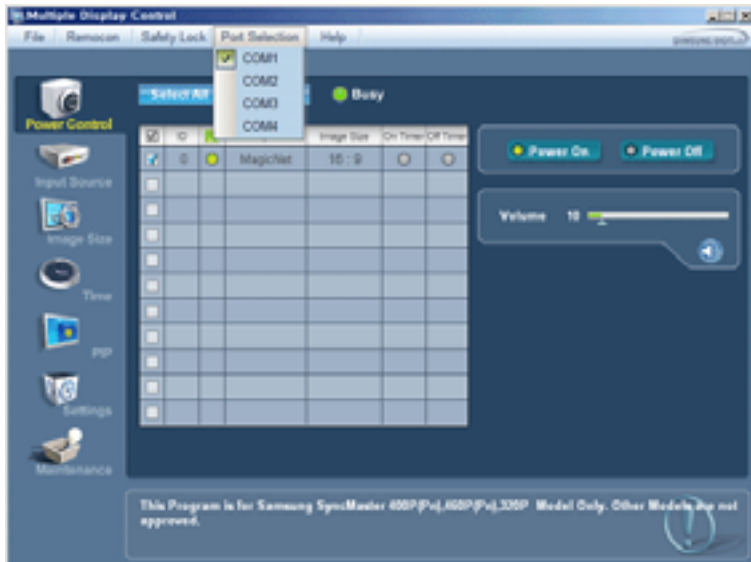
- |                         |                            |
|-------------------------|----------------------------|
| <b>1</b> Main Icons     | <b>5</b> Select Button     |
| <b>2</b> Remocon        | <b>6</b> Info Grid         |
| <b>3</b> Safety Lock    | <b>7</b> Display Selection |
| <b>4</b> Port Selection | <b>8</b> Control Tools     |

1. Use the main icons to switch into each screen.
2. Allows you to enable or disable the remote control signal receiving function of the display unit.
3. The setting for the PC Serial Port can change. The original value is COM1.
4. Sets the Lock Function.
5. Click Select all or Clear to select or clear all displays.
6. Use Grid to view brief information on selected display.
7. Select a display from Display Selection.
8. Use Control Tools to control displays.



The remote control Enable/Disable function operates whether or not the power is On/Off, and this applies to all displays connected to the displays connected to the MDC. However, regardless of the status at the time the MDC is shut down, the remote control signal receiving function of all displays is initialized to Enable when the MDC is closed.

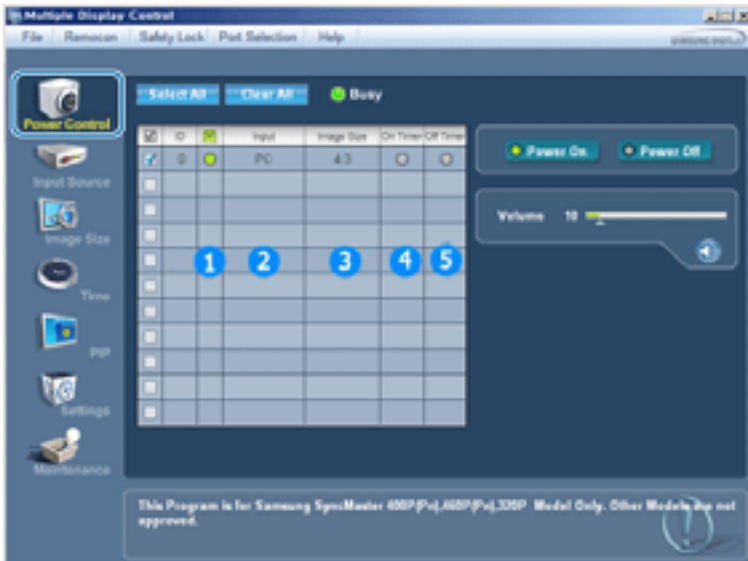
## 2. Beginning - Port Setting



1. Multiple Display Control is originally set to COM1.
2. If any port other than COM1 is used, COM1 to COM4 can be selected in Port Selection Menu.
3. If the exact port name which is connected to the monitor using a serial cable is not selected, communication will not be available.
4. The selected port is stored in the program and used for the next program as well.

### 3. Power Control

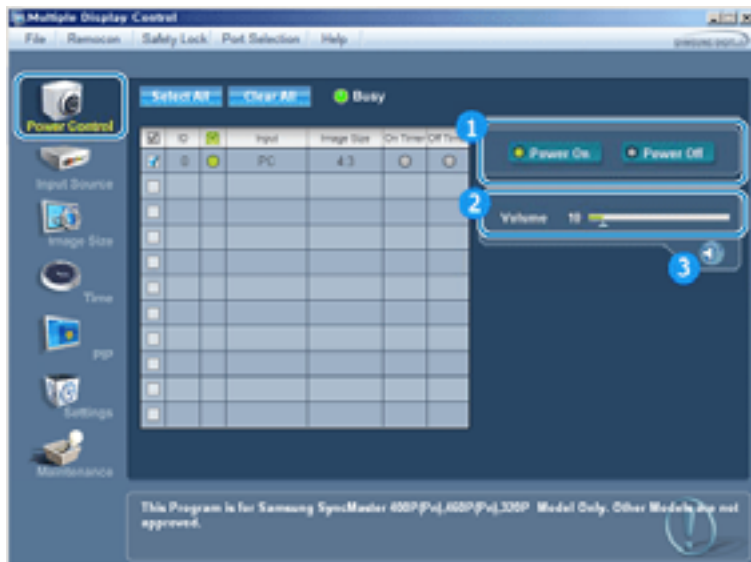
1. Click Power Control of the main icons and the Power Control screen appears.



► Info Grid shows some basic information necessary to Power Control.

- 1) Power Status
- 2) Input Source
- 3) Image Size
- 4) On Timer Status
- 5) Off Timer Status

2. Use the Select All button or Check Box to choose a display to control.



☛ **Power Control** allows controlling some of the functions of the selected display.

- 1) Power On/Off
  - Turns the power of the selected display On/Off.
- 2) Volume Control
  - Controls the volume level of the selected display.
  - It receives the volume value of the selected display from the sets and displays it in the slider.
  - (When you cancel the selection or choose Select All, the value returns to the default value 10)
- 3) Mute On/Off
  - Enables/disables the Mute function of the selected display.
  - When selecting one set at a time, enable Mute when the Mute function is enabled for the selected set.
  - The Mute function is disabled automatically when you adjust the volume level.
  - (The values return to the default settings when you undo the selections or choose "Select All.")

☛ **The Power Control feature is available for all displays.**

☛ **The Volume Control and Mute features are available only for the displays whose power status is ON.**

#### 4. Input Source Control

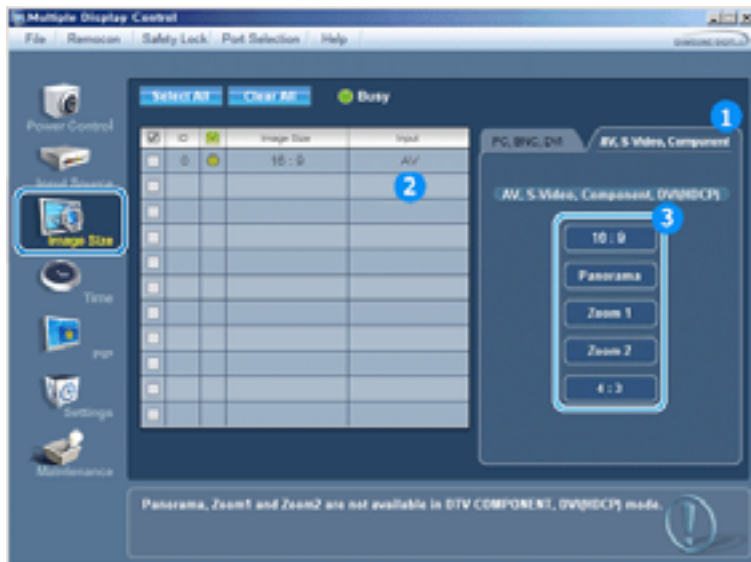
1. Click Input Source of the main icons and the Input Source control screen appears.  
Click Select All or use Check Box to select a display to control.



☛ **Info Grid** shows some basic information necessary to Input Source Control.

- 1) PC
  - Changes the Input Source of the selected display to PC.
- 2) BNC
  - Changes the Input Source of the selected display to BNC.





Info Grid shows some basic information necessary to Image Size Control.

- 1) Click the AV, S-Video, Component tab to adjust Image Size for AV, S-Video, Component. Click Select All or use Check Box to select a display to control.
- 2) Info Grid displays only the display having AV, S-Video, Component or DVI(HDCP) as input source.
- 3) Switch Image Size of the selected display randomly.



**Panorama, Zoom1 and Zoom2 are not available for selection when the input signal type for Component and DVI (HDCP) is 720p or 1080i.**

- The Image Size Control feature is available only for the displays whose power status is ON.
- The Input source of MagicNet works only on MagicNet model.

## 6. Time Control

1. Click Time of the main icons and the Time Control screen appears.



Info Grid shows some basic information necessary to Time Control.

- 1) Current Time
  - Set the current time for the selected display (PC Time).
  - To change the current time, first change the PC Time.
- 2) On Time Setup
  - Set the hour, minute, AM/PM of On Time, Status, Source, volume of the selected display.
- 3) Off Time Setup
  - Set the hour, minute, and AM/PM, Status for Off Timer of the selected display.
- 4) Shows the On Timer settings.
- 5) Shows the Off Timer settings.

- Time Control is available only for the displays for which the power status is ON.

■ The Input source of MagicNet works only on MagicNet model.

---

## 7. PIP Control - PIP Size

1. Click PIP of the main icons and the PIP control screen appears.  
Click Select All or use Check Box to select a display to control.



■ Info Grid shows some basic information necessary to PIP Size Control.

- 1) PIP Size
  - Shows the current PIP Size of the display in use.
- 2) OFF
  - Turns off the PIP of the selected display.
- 3) Large
  - Turns on the PIP of the selected display and changes the size to Large.
- 4) Small
  - Turns on the PIP of the selected display and changes the size to Small.
- 5) Double1
  - Turns on the PIP of the selected display and changes the size to Double 1.
- 6) Double2
  - Turns on the PIP of the selected display and changes the size to Double 2.
- 7) Double3 (Picture By Picture)
  - Turns on the PIP of the selected display and changes the size to Double 3.

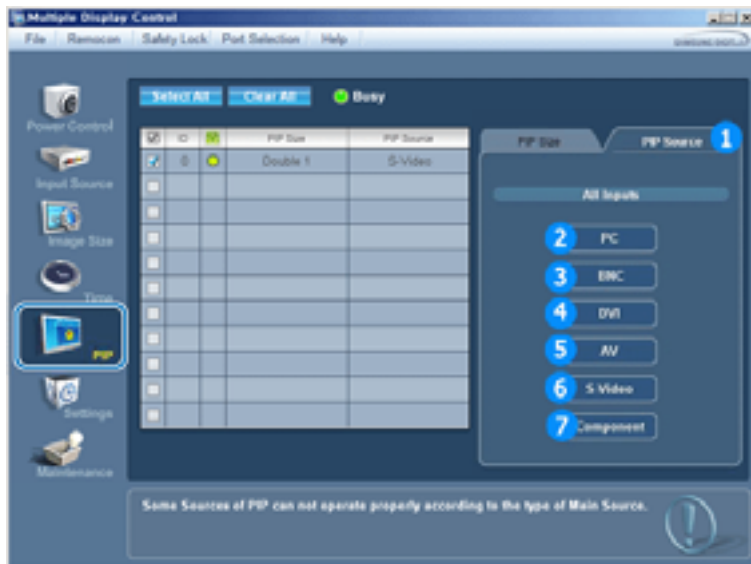
■ PIP Size can be controlled with turning on the monitor power.

■ The Input source of MagicNet works only on MagicNet model.

---

## 7. PIP Control - PIP Source

1. Click PIP of the main icons and the PIP control screen appears.



■ Info Grid shows some basic information necessary to PIP Source Control.

- 1) PIP Source
  - PIP Source can be controlled with turning on the monitor power.
- 2) PC
  - Changes the source of the PIP of the selected display to PC.
- 3) BNC
  - Changes the source of the PIP of the selected display to BNC.
- 4) DVI
  - Changes the source of the PIP of the selected display to DVI.
- 5) AV
  - Changes the source of the PIP of the selected display to AV.
- 6) S-Video
  - Changes the source of the PIP of the selected display to S-Video.
- 7) Component
  - Changes the source of the PIP of the selected display to Component.



**Some of the PIP Sources may not be available for selection depending on the input source type of the Main Screen.**

- **The PIP Control feature is available only for the displays whose power status is ON and the PIP function is set to ON.**
- **The Input source of MagicNet works only on MagicNet model.**

## 8. Settings Control - Picture

1. Click Settings of the main icons and the Settings Control screen appears.





- Info Grid shows some basic information necessary to Settings Control.  
When each function is selected, the set value of the selected function is displayed in the slide.  
When Select All is selected, the default value (50) returns.  
Changing a value in this screen will automatically change the mode to "CUSTOM."

- 1) Picture  
- Available only for AV, S-Video, Component, DVI(HDCP).
- 2) Contrast  
- Adjusts Contrast of the selected display.
- 3) Brightness  
- Adjusts Brightness of the selected display.
- 4) Sharpness  
- Adjusts Sharpness of the selected display.
- 5) Color  
- Adjusts Color of the selected display.
- 6) Tint  
- Adjusts Tint of the selected display.
- 7) Color Tone  
- Adjusts Color Tone of the selected display.

- **This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.**

- **The Input source of MagicNet works only on MagicNet model.**

## 8. Settings Control - Picture PC

1. Click Settings of the main icons and the Settings Control screen appears.



- ▮ Info Grid shows some basic information necessary to Settings Control. When each function is selected, the set value of the selected function is displayed in the slide. When Select All is selected, the default value (50) returns. Changing a value in this screen will automatically change the mode to "CUSTOM."

- 1) Picture PC
  - Available only for PC, BNC, DVI.
- 2) Contrast
  - Adjusts Contrast of the selected display.
- 3) Brightness
  - Adjusts Brightness of the selected display.
- 4) Red
  - Adjusts red Color of the selected display.
- 5) Green
  - Adjusts green Color of the selected display.
- 6) Blue
  - Adjusts blue Color of the selected display.

- ▮ **This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.**
- ▮ **The Input source of MagicNet works only on MagicNet model.**

## 8. Settings Control - Audio

1. Click Settings of the main icons and the Settings Control screen appears.



- ▮ Info Grid shows some basic information necessary to Settings Control. When each function is selected, the set value of the selected function is displayed in the slide.

When Select All is selected, the default value (50) returns.  
Changing a value in this screen will automatically change the mode to "CUSTOM."

- 1) Audio
  - Controls audio settings for all input sources.
- 2) Bass
  - Adjusts Bass of the selected display.
- 3) Treble
  - Adjusts Treble of the selected display.
- 4) Balance
  - Adjusts Balance of the selected display.
- 5) Dolby Virtual
  - Dolby Virtual Sound On/Off of the selected display.
- 6) BBE
  - BBE Sound On/Off of the selected display.
- 7) Sound Select
  - Select either Main or Sub when PIP is On.

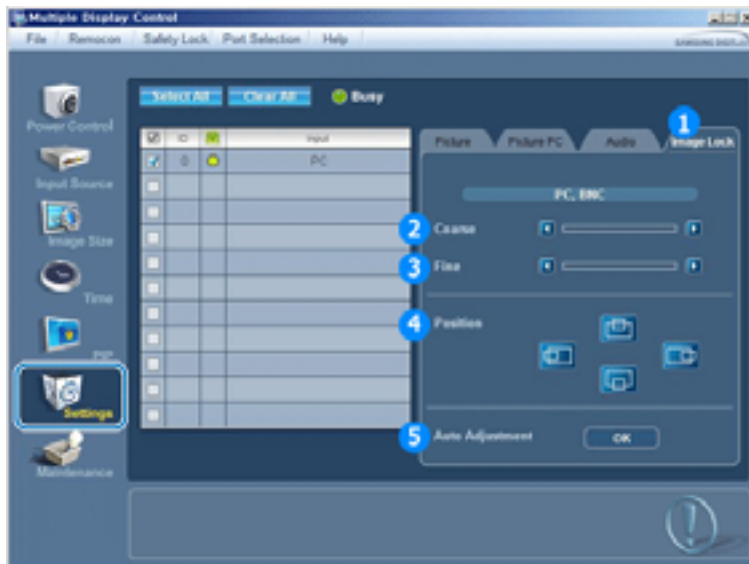
■ **This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.**

■ **The Input source of MagicNet works only on MagicNet model.**

---

## 8. Settings Control - Image Lock

1. Click Settings of the main icons and the Settings Control screen appears.



■ Info Grid shows some basic information necessary to Settings Control.

- 1) Image Lock
  - Available only for PC, BNC.
- 2) Coarse
  - Adjusts Coarse of the selected display.
- 3) Fine
  - Adjusts Fine of the selected display.
- 4) Position
  - Adjusts Position of the selected display.
- 5) Auto Adjustment
  - Self-Adjust to the incoming PC signal.

■ **Settings Control is available only for the displays for which the power status is ON.**

■ **The Input source of MagicNet works only on MagicNet model.**

---

## 9. Maintenance Control - Lamp Control

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



▮ An "Info Grid" showing several basic data items appears.

1) Maintenance

- Allows Maintenance Control for all input sources.

2) Auto Lamp Control

- Automatically adjusts the backlight of the selected display at a specified time.

- The Auto Lamp Control automatically turns off if you adjust using the Manual Lamp Control.

3) Manual Lamp Control

- Allows you to adjust the backlight of the selected display regardless of the time.

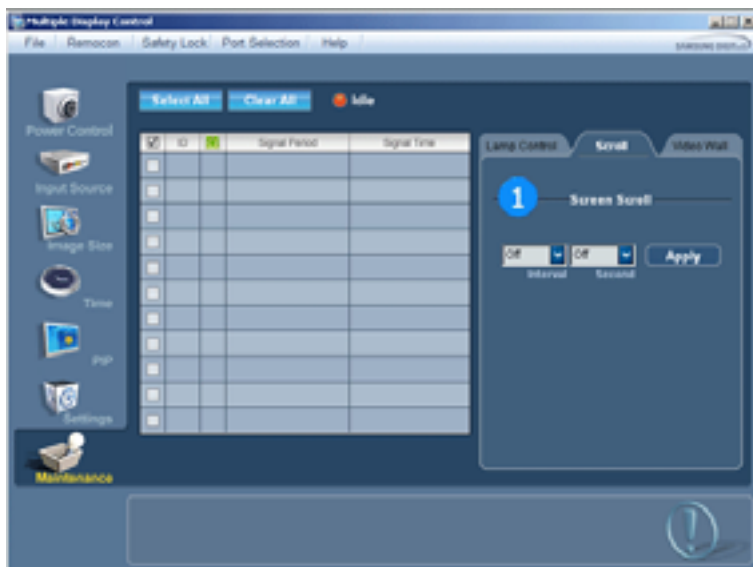
The Auto Lamp Control automatically turns off if you adjust using the Manual Lamp Control function.

▮ **The Maintenance Control feature is available only for the displays whose power status is ON.**

▮ **The Input source of MagicNet works only on MagicNet model.**

## 10. Maintenance Control - Scroll

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



1) Screen Scroll

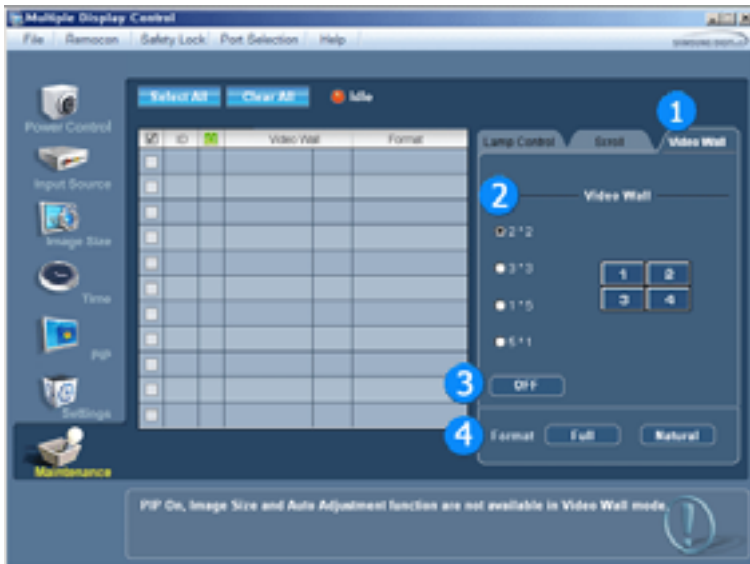
Eliminates the afterimages that can result when the selected display stays in Pause mode for an extended period of time. You can set the repeat cycle timer by selecting the "Interval" by hour and "Second" by second.

▮ **The Maintenance Control feature is available only for the displays whose power status is ON.**

▮ **The Input source of MagicNet works only on MagicNet model.**

## 11. Maintenance Control - Video Wall

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



1) Video Wall

- A Video Wall is a set of video screens that are connected together, so that each screen shows a part of the whole picture or so that the same picture is repeated on each screen.

2) Screen Divider

- The screen can be divided into.  
You can select a number of screens with a different layout when dividing.

- Select a mode from Screen Divider.
- Select a display from Display Selection.
- The place will be set up by pressing a number in the selected mode..

- 2\*2
 

1	2
3	4
- 3\*3
 

1	2	3
4	5	6
7	8	9
- 1\*5
 

1	2	3	4	5
---	---	---	---	---
- 5\*1
 

1
2
3
4
5

3) On / Off

- Turns on/off the Video Wall function of the selected display.

4) Format

- The format can be selected to see a divided screen.

- Full
 

Multiple	Display
Control	Control
- Natural
 

Multiple	Display
Control	Control

- The Maintenance Control function is available only for the displays where the power status is ON.
  - The Input source of MagicNet works only on MagicNet model.
- 

## 12. Troubleshooting

1. The display you wish to control does not appear on the Power Control Info Grid
  - Check the connection of RS232C. (Check if it is properly connected to the Com1 port)
  - Check the displays to see if any of the other displays connected have the same ID. If more than one displays have the same ID, those displays are not properly detected by the program due to data conflict.
  - Check if the Display Set ID is a number between 1 and 10. (Adjust using the Display menu)

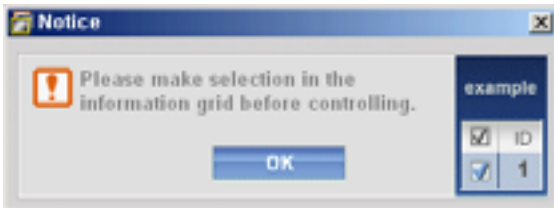


A Display Set ID must be a value between 1 and 10.  
If the value is out of the range, the MDC system cannot control the display.

2. The display you wish to control does not appear on the other Control Info Grids
  - Check to see if the display power is ON. (You can check this in Power Control Info Grid)
  - Check if you can change the input source of the display.
3. The dialogue box appears repeatedly.
  - Check to see if the display you wish to control is selected.
4. Both On Timer and Off Timer have been set but different time is showing.
  - Apply current time to synchronize the display clocks.
5. The remote may not function properly when you turn off the remote Function, disconnect the RS-232C cable, or exit the program in an Irregular manner. Rerun the program and turn the remote function again to Restore normal functions.



This program may malfunction due to problems in communication circuits or interference from electronic appliances nearby.



---

## 13. Settings Value Display In Multiple Display Mode

- When there are more than one displays connected, the settings values are displayed as follows.
1. No selection: Displays the Factory Default Value.
  2. Selected one display: Fetches and displays the settings value for the selected display.
  3. Selected one display (ID1) and add another display (ID3): The program, which was displaying the settings value of ID 1, fetches and displays the value of ID3.
  4. Selected all sets using Select All: Returns to the Factory Default Value.
- 





One of the recent problems in using a computer is that the color of the images printed out by a printer or other images scanned by a scanner or a digital camera are not the same as those shown on the monitor.

The Natural Color S/W is the very solution for this problem. It is a color administration system developed by Samsung Electronics in association with Korea Electronics & Telecommunications Research Institute (ETRI).

This system is available only for Samsung monitors and makes the color of the images on the monitor the same as the printed or scanned images.

For more information, refer to Help (F1) in the software program.

#### **How to install the Natural Color software**

Insert the CD included with the Samsung monitor into the CD-ROM Drive. Then, the initial screen of the program Natural Color will be executed. Click Natural Color on the initial screen to install the Natural Color software.

To install the program manually, insert the CD included with the Samsung monitor into the CD-ROM Drive, click the [Start] button of Windows and then select [Execute].

Enter D:\color\eng\setup.exe and then press the <Enter> key.

(If the drive where the CD is inserted is not D:\, enter the applicable drive.)

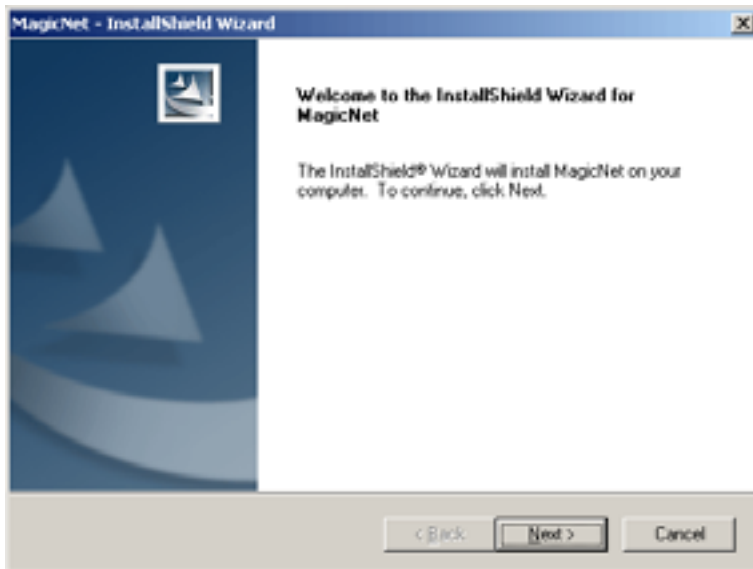
#### **How to delete the Natural Color software program**

Select "**Setting**" / "**Control Panel**" on the "**Start**" menu and then double-click "**Add/Delete a program**".

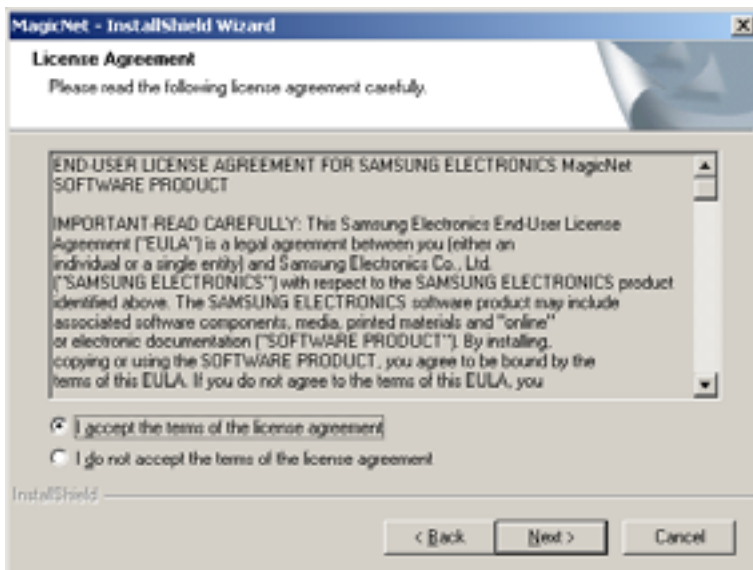
Select Natural Color from the list and then click the [Add/Delete] button.

## Installation

1. Insert the installation CD into the CD-ROM drive.
2. Click the MagicNet installation file.
3. When the InstallShield Wizard window appears, click "Next."

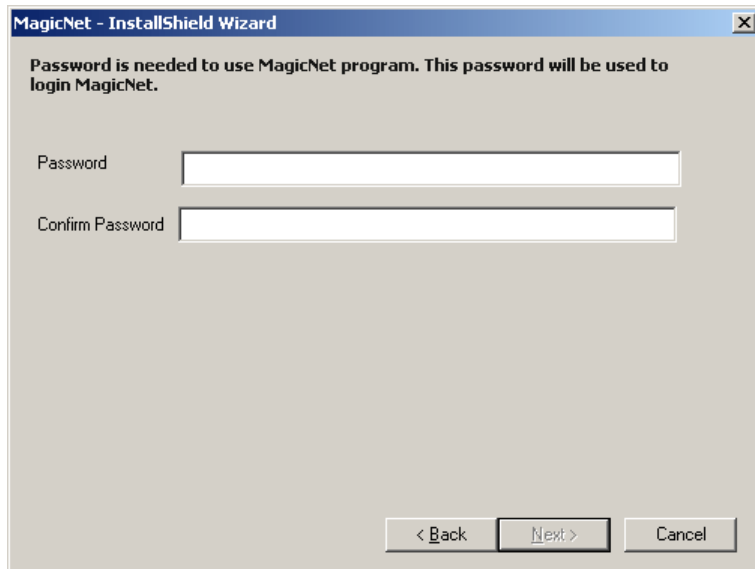


4. Select "I agree to the terms of the license agreement" to accept the terms of use.

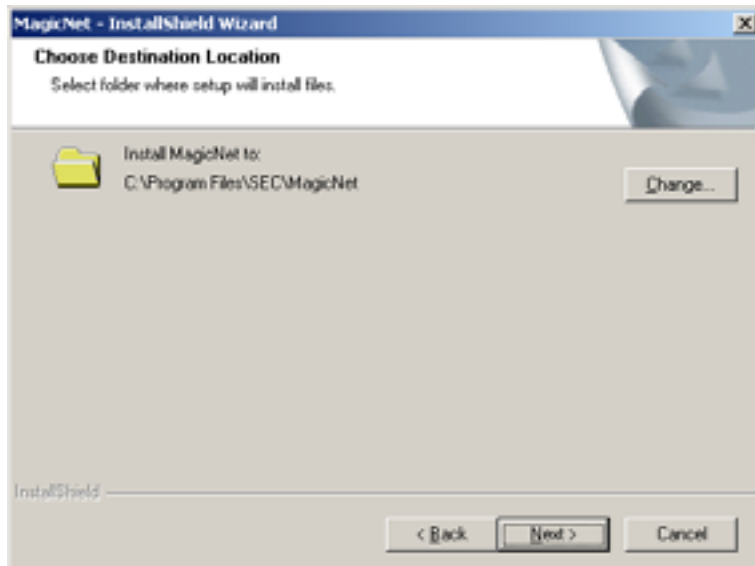


5. You are required to log in to the MagicNet Server program. Please enter the password to login. The password cannot be changed when you are logged in.

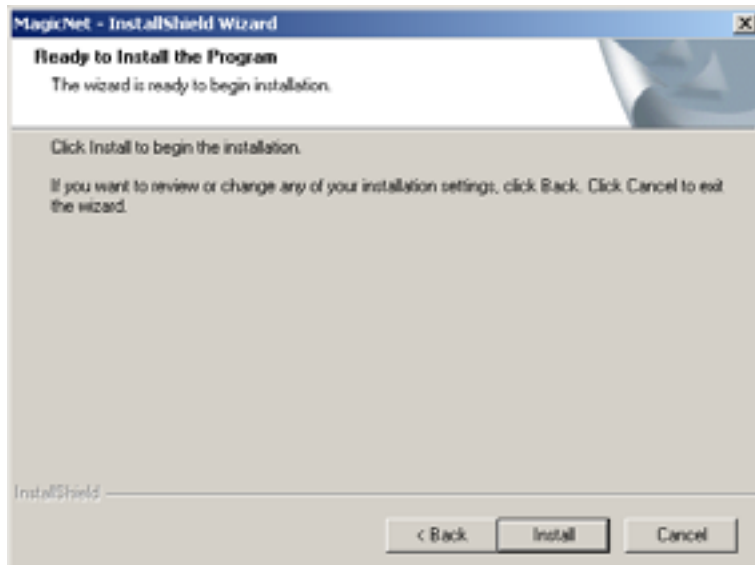




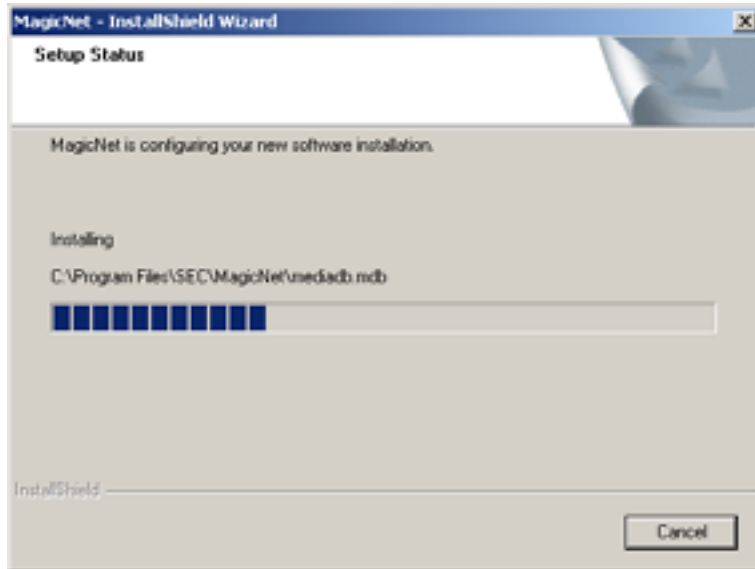
6. Choose a folder to install the MagicNet program.



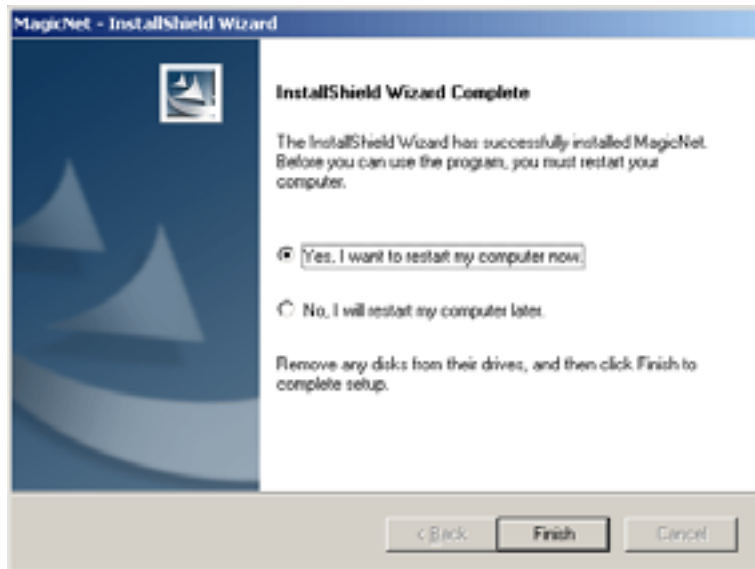
7. Click "Install."



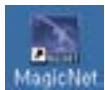
8. The "Installation Status" window appears.



9. It is recommended restarting the system for the normal operation of the MagicNet Server program.  
Click "Finish."



10. When the installation is complete, the MagicNet executable icon appears on your desktop.



11. Double-click the icon to start the program.

## System Requirements

	CPU	RAM	Ethernet	OS	Application
<b>Minimum</b>	P1.8	256M		Windows XP	
<b>Recommended</b>	P3.0Ghz	512M	100M	Windows 2000 (Service Pack 4)	WMP 9 or later



## Installing Stand Kit



Only the supplied bolts should be used.



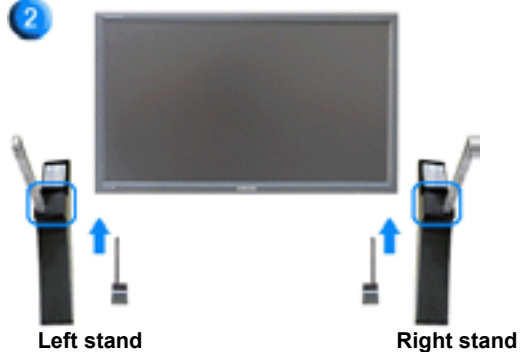
Samsung Electronics will not be responsible for damages caused by using a base other than those specified.

### 1. Installing the Semi Stand

1



2



Make sure to install the stand with Caution label folded backward.

3



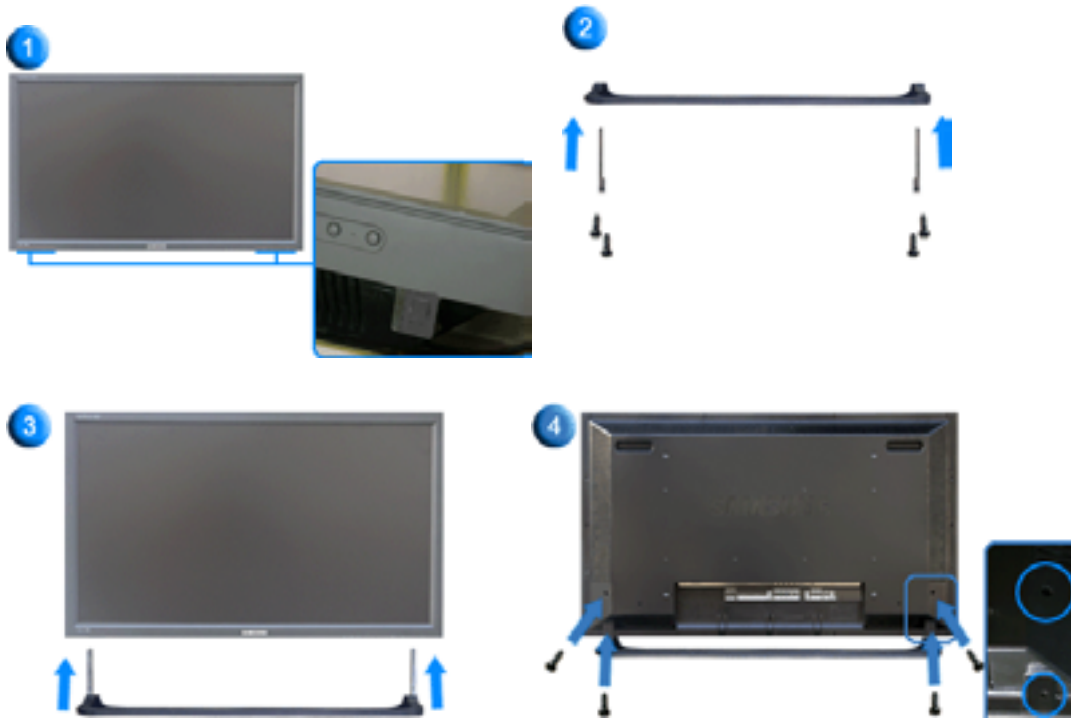
1. A 'Cover-Protector' is used to protect the hole at the bottom of the monitor, where the stand is inserted. Be sure to remove the 'Cover-Protector' when attaching the provided Semi Stand or stand kit (sold separately) and cover the hole using the 'Cover-Hole' when attaching the wall mount kit.

2. Set up the left and right stands respectively.
3. Put the stand into the hole at the bottom of the monitor.  
Insert screw into the hole indicated and tighten. (M4 × L15)



This stand is originally designed for the adjustment of the screen angle. And the company is not responsible for any problem caused by any use of this stand. Do never use the product as a stand on which something is placed.

## 2. Installing Stand Kit (sold separately)



1. A 'Cover-Protector' is used to protect the hole at the bottom of the monitor, where the stand is inserted. Be sure to remove the 'Cover-Protector' when attaching the provided Semi Stand or stand kit (sold separately) and cover the hole using the 'Cover-Hole' when attaching the wall mount kit.
2. Make sure you put the parts in the right direction and in the right place. (M4 × L15)
3. Put the stand into the hole at the bottom of the monitor.
4. Insert screw into the hole indicated and tighten. (M4 × L15)

Installing Stand Kit

Connecting the Monitor

MDC

Natural Color

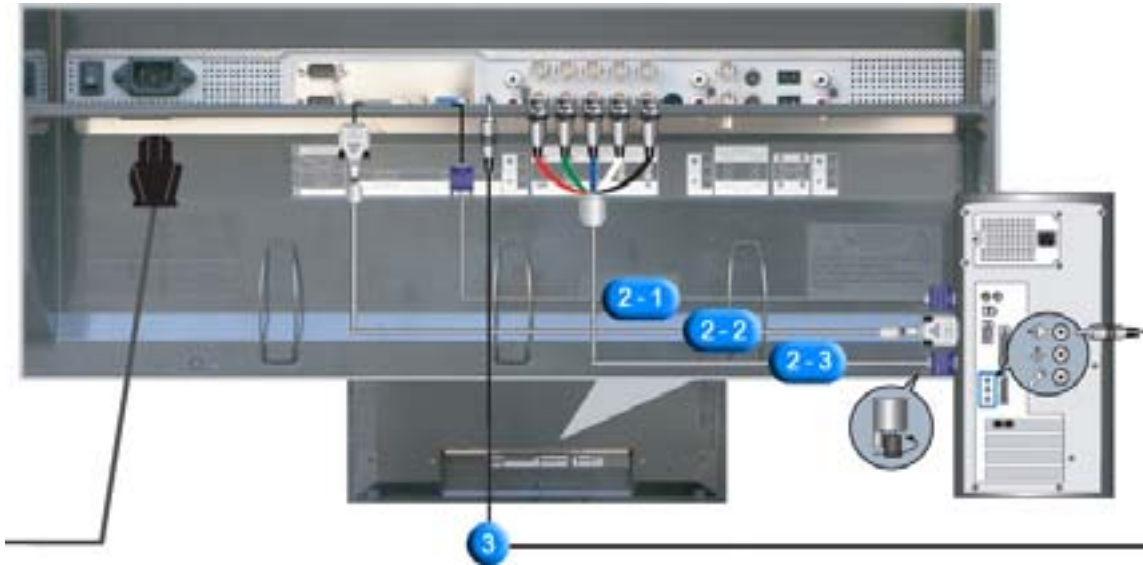
### In case of Power cord with Earth

In the event of failure, earth lead may cause electric shock. Make sure to wire the earth lead in an appropriate manner, before plug-in the AC power. Or, when un-wire the earth lead, make sure to plug-off the AC power in advance.



AV input devices like DVDs, VCRs or Camcorders as well as your computer may be connected to the monitor. For detailed information on connecting AV input devices, refer to User Controls under Adjusting Your Monitor.

## 1. Connecting to a Computer



1. Connect the power cord for your monitor to the power port on the back of the monitor.  
Turn on power switch.
2. There are 3 ways to connect the signal cable to your monitor.  
Choose one of the followings :
  - 2-1. Using the D-sub (Analog) connector on the video card.  
Connect the signal cable to the 15-pin, RGB port on the back of your monitor.



- 2-2. Using the DVI (Digital) connector on the video card.  
Connect the DVI Cable to the DVI(HDCP) port on the back of your monitor.



- 2-3. Using the BNC (Analog) connector on the video card.  
Connect the BNC Cable to the **BNC/COMPONENT IN - R, G, B, H, V port** on the back of your Monitor and the **15 pin D-sub Port** on the computer.



DVI cable or BNC cable is optional.

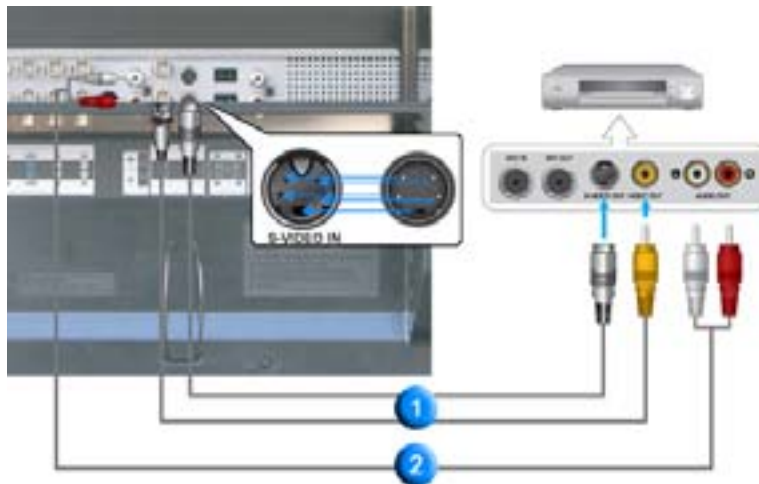
3. Connect the audio cable for your monitor to the audio port on the back of your computer.
4. Turn on both your computer and the monitor.



Contact a local Samsung Electronics [Service Center](#) to buy optional items.

---

## 2. Connecting to a VCR



1. AV input devices like VCRs or Camcorders are connected to the **AV IN [VIDEO]** or **AV IN [S-VIDEO]** of the monitor using the S-VHS or BNC cable.

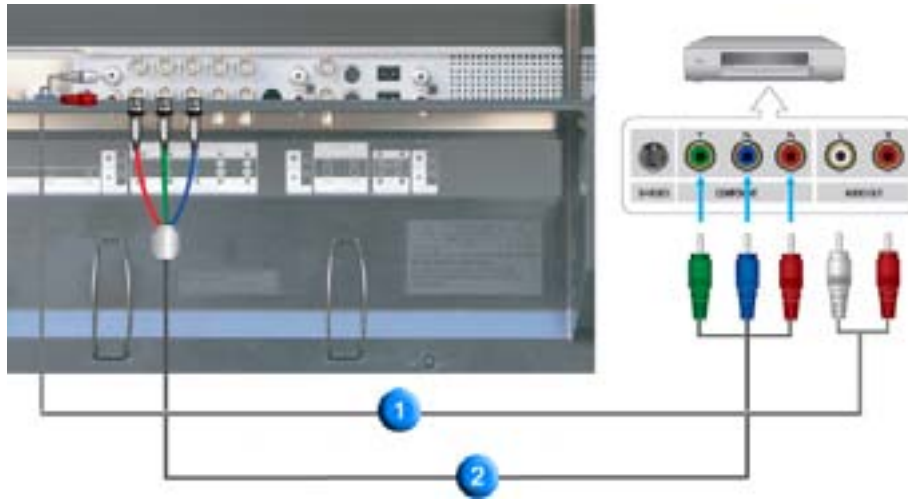


S-VHS or BNC cable is optional.

2. Connect the Audio (L) and Audio (R) terminals of a VCR or Camcorders to the monitor's **AV AUDIO IN [L-AUDIO-R]** using audio cables.
3. Select **AV** or **S-Video** that is connected to a VCR or Camcorders using the Source button on the monitor's front or remote control.
4. Then, start the VCR or Camcorders with a tape inserted.

---

## 3. Connecting to a DVD Player



1. Connect a set of audio cables between the **COMPONENT AUDIO IN [L-AUDIO-R]** on the Monitor and the AUDIO OUT jacks on the DVD player.
2. Connect a Component cable between the **BNC/COMPONENT IN - Pr, Y, Pb port** on the Monitor and the Pr, Y, Pb jacks on the DVD player.



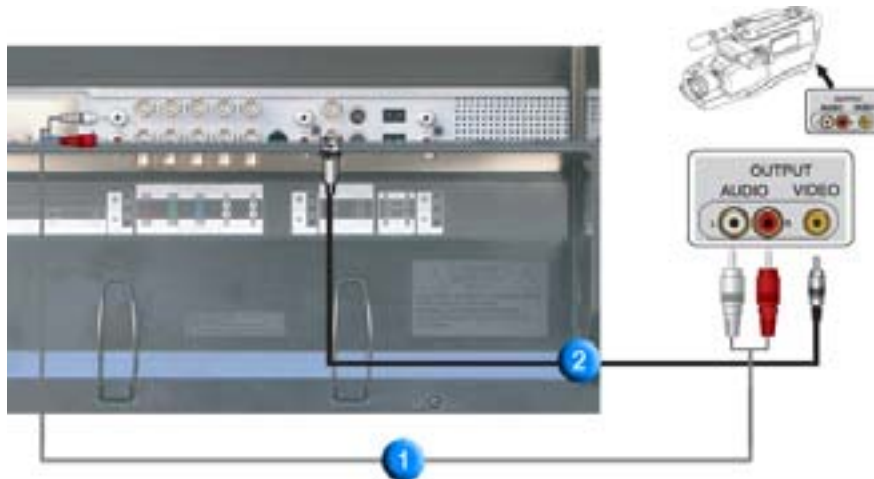
Component cable is optional.

3. Select **Component** that is connected to a DVD player using the Source button on the monitor's front or remote control.
4. Then, start the DVD Player with a DVD disc inserted.



For an explanation of Component video, see your DVD player owner's manual.

#### 4. Connecting a Camcorder



1. Locate the A/V output jacks on the camcorder. They are usually found on the side or back of the camcorder.  
Connect a set of audio cables between the AUDIO OUTPUT jacks on the camcorder and the **COMPONENT AUDIO IN [L-AUDIO-R]** on the Monitor.
2. Connect a video cable between the VIDEO OUTPUT jack on the camcorder and the **AV IN [VIDEO]** on the Monitor.
3. Select **AV** that is connected to a Camcorder using the Source button on the monitor's front or remote control.
4. Then, start the Camcorders with a tape inserted.



The audio-video cables shown here are usually included with a Camcorder.  
(If not, check your local electronics store.)  
If your camcorder is stereo, you need to connect a set of two cables.

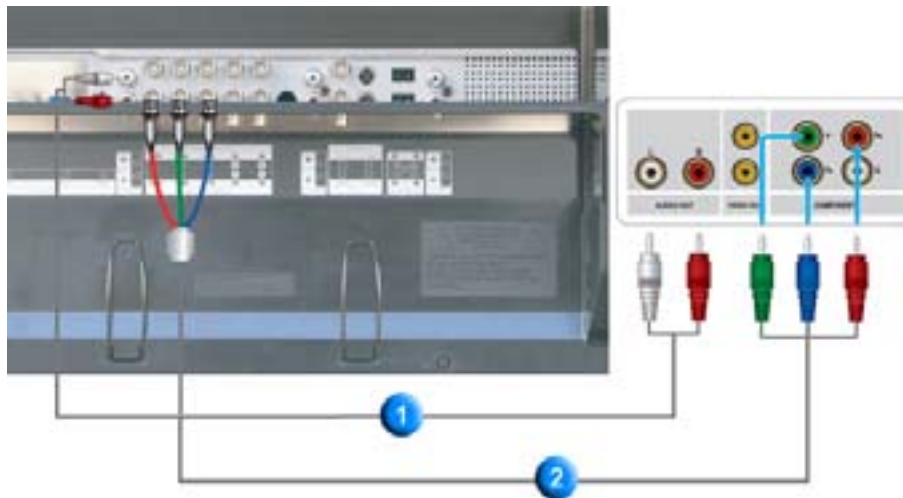


---

## 5. Connecting DTV Set Top Box



The connections for a typical Set Top Box are shown below.



1. Connect a set of audio cables between the **COMPONENT AUDIO IN [L-AUDIO-R]** on the Monitor and the **AUDIO OUT** jacks on the Set Top Box.
2. Connect a Component cable between the **BNC/COMPONENT IN - P<sub>R</sub>, Y, P<sub>B</sub> port** on the Monitor and the **P<sub>R</sub>, Y, P<sub>B</sub>** jacks on the Set Top Box.
3. Select **Component** that is connected to a DTV Set Top Box using the Source button on the monitor's front or remote control.



For an explanation of Component video, see your Set Top Box owner's manual.

---

## 6. Connecting Speakers

1. Tighten the SET and the speaker using the screws.



\* Mount the set of the speaker without the speaker stand.

2. Connect the speaker connection cable between the speaker connection jack on the rear of the SET and the speaker connection jack on the rear of the speaker.

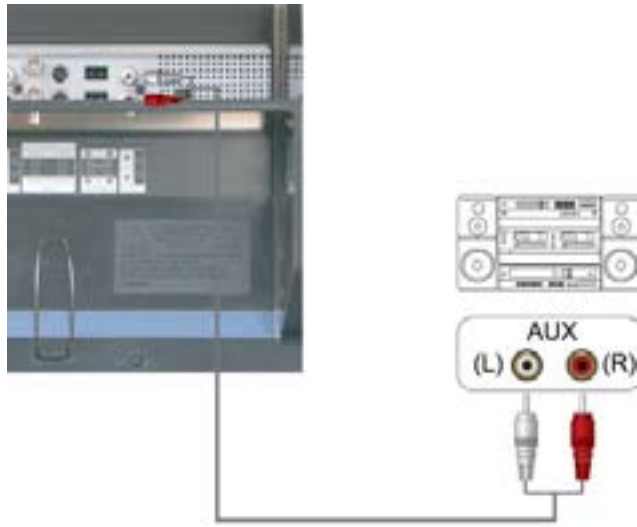


Do not move the SET holding the speaker when the SET is connected to the speaker. The speaker-bracket for connecting the SET speaker may be damaged.

---

## 7. Connecting to an Audio System





1. Connect a set of audio cables between the AUX L, R jacks on the AUDIO SYSTEM and the **MONITOR OUT [L-AUDIO-R]** on the Monitor.

---

Installing Stand Kit

Connecting the Monitor

**MDC**

Natural Color

---

Multimedia Display Control

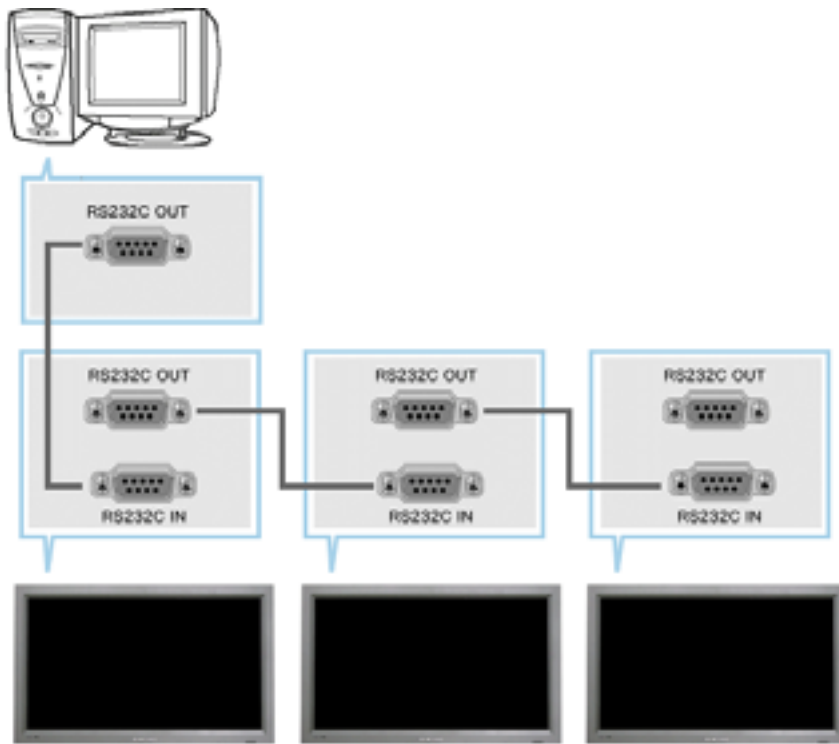
# MDC System

---

1. Introduction
2. Beginning :  
Main Screen | Port Setting |
3. Power Control
4. Input Source Control
5. Image Size Control :  
PC, BNC, DVI |  
AV, S-Video, Component, DVI(HDCP)

6. Time Control
7. PIP Control :  
PIP Size | PIP Source
8. Settings Control :  
Picture | Picture PC | Audio | Image Lock |
9. Maintenance Control - Lamp Control
10. Maintenance Control - Scroll
11. Maintenance Control - Video Wall
12. Troubleshooting
13. Settings Value Display In Multiple Display Mode

## 1. Introduction

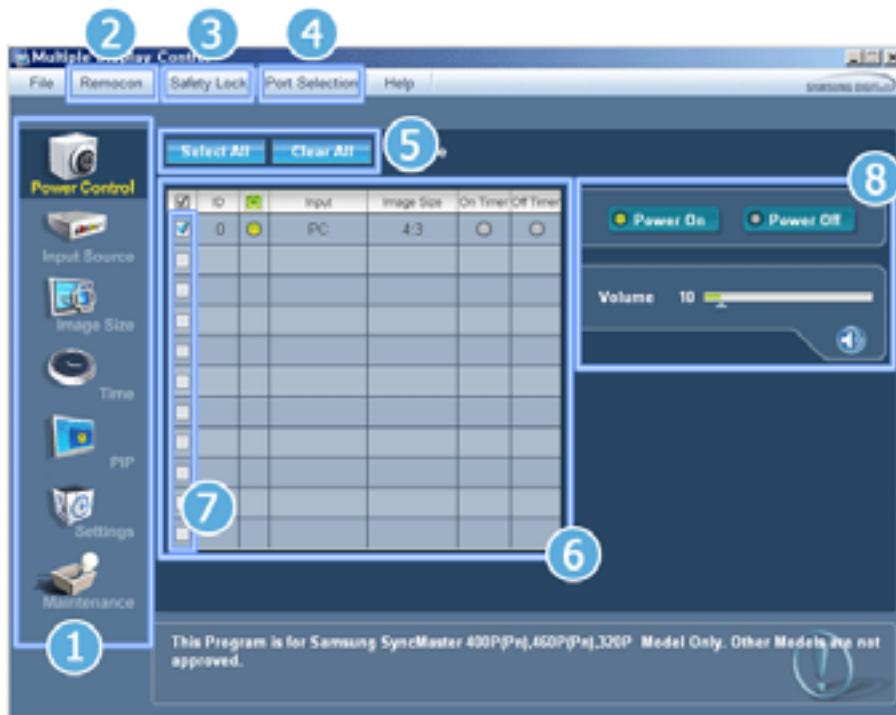


A Multiple Display Control (MDC) is an application allowing various displays to be easily and simultaneously operated on a PC. RS-232C, a standard of serial communication, is used for the communication between a PC and a display. Therefore, a serial cable should be connected between the serial port on a PC and the serial port on a display.

---

## 2. Main Screen

- Click Start > Program > Multiple Display Control to start the program.
- Select a set to see the volume of the selected set within the slider.



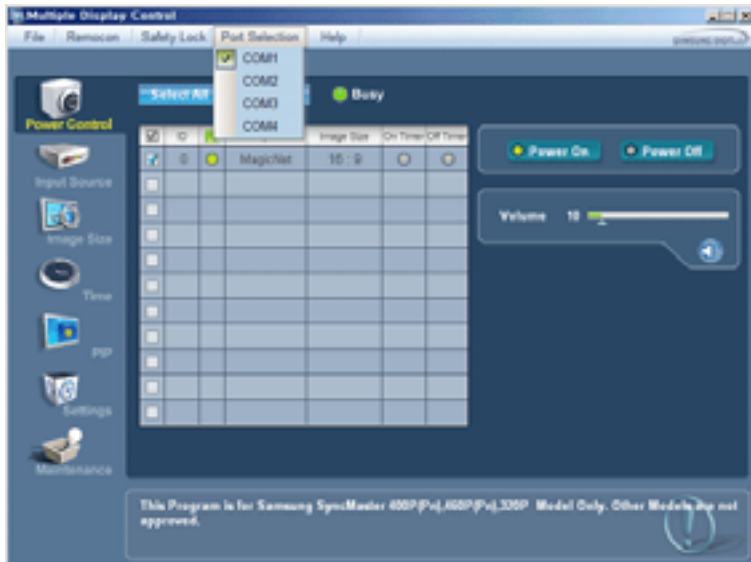
- |                         |                            |
|-------------------------|----------------------------|
| <b>1</b> Main Icons     | <b>5</b> Select Button     |
| <b>2</b> Remocon        | <b>6</b> Info Grid         |
| <b>3</b> Safety Lock    | <b>7</b> Display Selection |
| <b>4</b> Port Selection | <b>8</b> Control Tools     |

1. Use the main icons to switch into each screen.
2. Allows you to enable or disable the remote control signal receiving function of the display unit.
3. The setting for the PC Serial Port can change. The original value is COM1.
4. Sets the Lock Function.
5. Click Select all or Clear to select or clear all displays.
6. Use Grid to view brief information on selected display.
7. Select a display from Display Selection.
8. Use Control Tools to control displays.



The remote control Enable/Disable function operates whether or not the power is On/Off, and this applies to all displays connected to the displays connected to the MDC. However, regardless of the status at the time the MDC is shut down, the remote control signal receiving function of all displays is initialized to Enable when the MDC is closed.

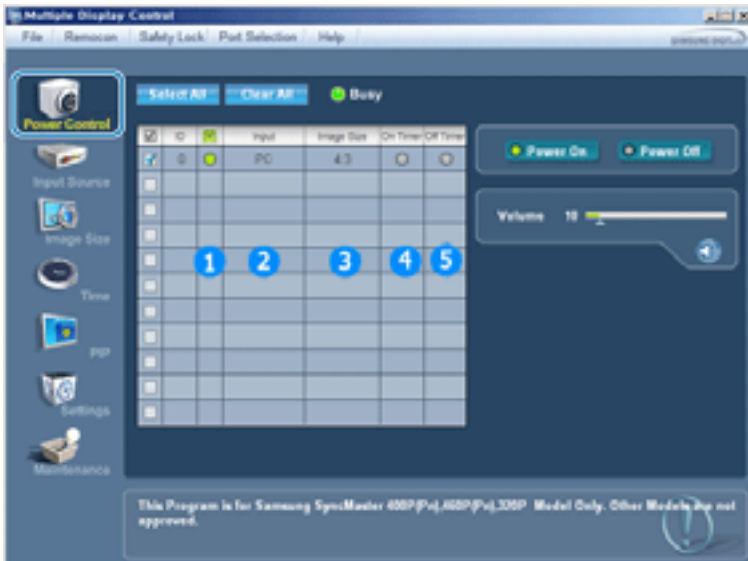
## 2. Beginning - Port Setting



1. Multiple Display Control is originally set to COM1.
2. If any port other than COM1 is used, COM1 to COM4 can be selected in Port Selection Menu.
3. If the exact port name which is connected to the monitor using a serial cable is not selected, communication will not be available.
4. The selected port is stored in the program and used for the next program as well.

### 3. Power Control

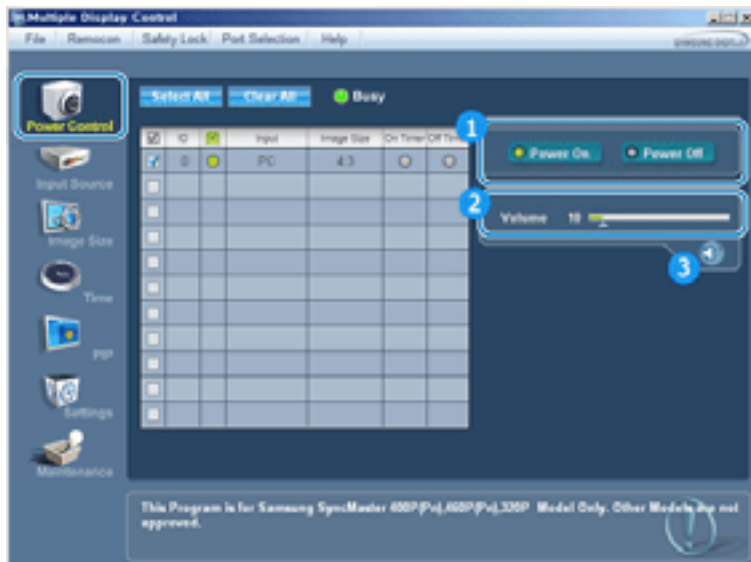
1. Click Power Control of the main icons and the Power Control screen appears.



► Info Grid shows some basic information necessary to Power Control.

- 1) Power Status
- 2) Input Source
- 3) Image Size
- 4) On Timer Status
- 5) Off Timer Status

2. Use the Select All button or Check Box to choose a display to control.



Power Control allows controlling some of the functions of the selected display.

1) Power On/Off

- Turns the power of the selected display On/Off.

2) Volume Control

- Controls the volume level of the selected display.

It receives the volume value of the selected display from the sets and displays it in the slider.  
(When you cancel the selection or choose Select All, the value returns to the default value 10)

3) Mute On/Off

- Enables/disables the Mute function of the selected display.

When selecting one set at a time, enable Mute when the Mute function is enabled for the selected set.  
The Mute function is disabled automatically when you adjust the volume level.

(The values return to the default settings when you undo the selections or choose "Select All.")

**The Power Control feature is available for all displays.**

**The Volume Control and Mute features are available only for the displays whose power status is ON.**

#### 4. Input Source Control

1. Click Input Source of the main icons and the Input Source control screen appears.

Click Select All or use Check Box to select a display to control.



Info Grid shows some basic information necessary to Input Source Control.

1) PC

- Changes the Input Source of the selected display to PC.

2) BNC

- Changes the Input Source of the selected display to BNC.

- 3) DVI
  - Changes the Input Source of the selected display to DVI.
- 4) AV
  - Changes the Input Source of the selected display to AV.
- 5) S-Video
  - Changes the Input Source of the selected display to S-Video.
- 6) Component
  - Changes the Input Source of the selected display to Component.
- 7) MagicNet
  - The Input source of MagicNet works only on MagicNet model.

■ **The Input Source Control feature is available only for the displays whose power status is ON.**

---

## 5. Image Size Control - PC, BNC, DVI

1. Click Image Size of the main icons and the Image Size control screen appears.



■ Info Grid shows some basic information necessary to Image Size Control.

- 1) Power
  - Shows the power status of the current display.
- 2) Image Size
  - Shows the current Image Size of the display in use.
- 3) Input Source
  - Shows the current Input Source of the display in use.
- 4) Info Grid displays only the displays whose Input Source is PC,BNC,DVI .
- 5) When you click Image Size, the PC, BNC, DVI tabs first appear.
  - The Image Size Control button controls Image Size available for PC,BNC,DVI.
- 6) Click the AV, S-Video, Component tab to control Image Size for respective Input Source.

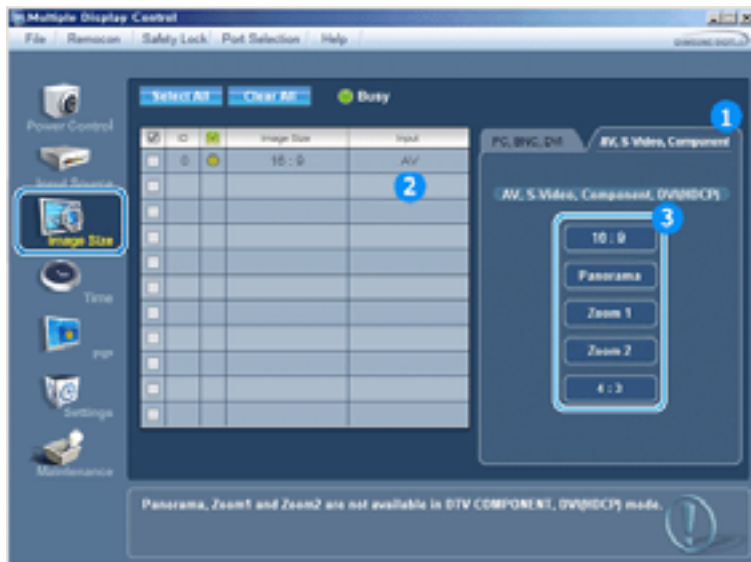
■ **Image Size Control is available only for the displays for which power status is ON.**

■ **The Input source of MagicNet works only on MagicNet model.**

---

## 5. Image Size Control - AV, S-Video, Component, DVI(HDCP)

1. Click Image Size of the main icons and the Image Size control screen appears.



Info Grid shows some basic information necessary to Image Size Control.

- 1) Click the AV, S-Video, Component tab to adjust Image Size for AV, S-Video, Component. Click Select All or use Check Box to select a display to control.
- 2) Info Grid displays only the display having AV, S-Video, Component or DVI(HDCP) as input source.
- 3) Switch Image Size of the selected display randomly.



**Panorama, Zoom1 and Zoom2 are not available for selection when the input signal type for Component and DVI (HDCP) is 720p or 1080i.**

- The Image Size Control feature is available only for the displays whose power status is ON.
- The Input source of MagicNet works only on MagicNet model.

## 6. Time Control

1. Click Time of the main icons and the Time Control screen appears.



Info Grid shows some basic information necessary to Time Control.

- 1) Current Time
  - Set the current time for the selected display (PC Time).
  - To change the current time, first change the PC Time.
- 2) On Time Setup
  - Set the hour, minute, AM/PM of On Time, Status, Source, volume of the selected display.
- 3) Off Time Setup
  - Set the hour, minute, and AM/PM, Status for Off Timer of the selected display.
- 4) Shows the On Timer settings.
- 5) Shows the Off Timer settings.

- Time Control is available only for the displays for which the power status is ON.

■ The Input source of MagicNet works only on MagicNet model.

---

## 7. PIP Control - PIP Size

1. Click PIP of the main icons and the PIP control screen appears.  
Click Select All or use Check Box to select a display to control.



■ Info Grid shows some basic information necessary to PIP Size Control.

- 1) PIP Size
  - Shows the current PIP Size of the display in use.
- 2) OFF
  - Turns off the PIP of the selected display.
- 3) Large
  - Turns on the PIP of the selected display and changes the size to Large.
- 4) Small
  - Turns on the PIP of the selected display and changes the size to Small.
- 5) Double1
  - Turns on the PIP of the selected display and changes the size to Double 1.
- 6) Double2
  - Turns on the PIP of the selected display and changes the size to Double 2.
- 7) Double3 (Picture By Picture)
  - Turns on the PIP of the selected display and changes the size to Double 3.

■ PIP Size can be controlled with turning on the monitor power.

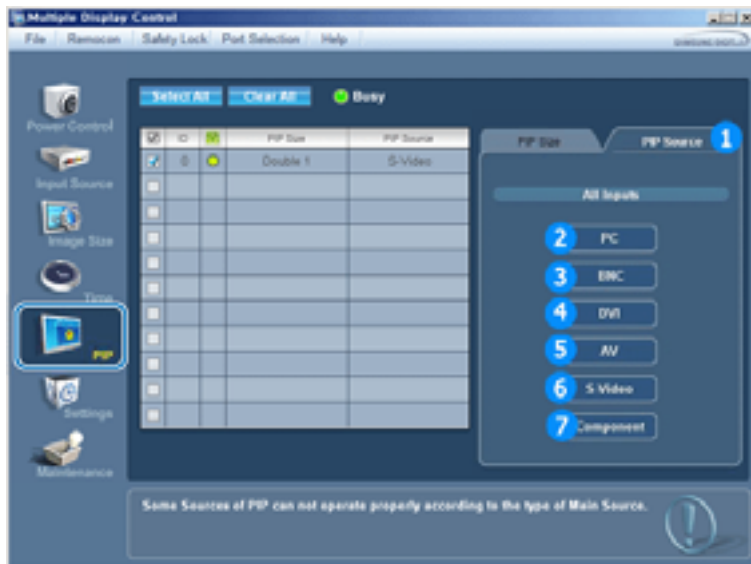
■ The Input source of MagicNet works only on MagicNet model.

---

## 7. PIP Control - PIP Source

1. Click PIP of the main icons and the PIP control screen appears.





■ Info Grid shows some basic information necessary to PIP Source Control.

- 1) PIP Source
  - PIP Source can be controlled with turning on the monitor power.
- 2) PC
  - Changes the source of the PIP of the selected display to PC.
- 3) BNC
  - Changes the source of the PIP of the selected display to BNC.
- 4) DVI
  - Changes the source of the PIP of the selected display to DVI.
- 5) AV
  - Changes the source of the PIP of the selected display to AV.
- 6) S-Video
  - Changes the source of the PIP of the selected display to S-Video.
- 7) Component
  - Changes the source of the PIP of the selected display to Component.



**Some of the PIP Sources may not be available for selection depending on the input source type of the Main Screen.**

- **The PIP Control feature is available only for the displays whose power status is ON and the PIP function is set to ON.**
- **The Input source of MagicNet works only on MagicNet model.**

## 8. Settings Control - Picture

1. Click Settings of the main icons and the Settings Control screen appears.



- Info Grid shows some basic information necessary to Settings Control.  
When each function is selected, the set value of the selected function is displayed in the slide.  
When Select All is selected, the default value (50) returns.  
Changing a value in this screen will automatically change the mode to "CUSTOM."

- 1) Picture  
- Available only for AV, S-Video, Component, DVI(HDCP).
- 2) Contrast  
- Adjusts Contrast of the selected display.
- 3) Brightness  
- Adjusts Brightness of the selected display.
- 4) Sharpness  
- Adjusts Sharpness of the selected display.
- 5) Color  
- Adjusts Color of the selected display.
- 6) Tint  
- Adjusts Tint of the selected display.
- 7) Color Tone  
- Adjusts Color Tone of the selected display.

- **This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.**

- **The Input source of MagicNet works only on MagicNet model.**

## 8. Settings Control - Picture PC

1. Click Settings of the main icons and the Settings Control screen appears.



- ▣ Info Grid shows some basic information necessary to Settings Control. When each function is selected, the set value of the selected function is displayed in the slide. When Select All is selected, the default value (50) returns. Changing a value in this screen will automatically change the mode to "CUSTOM."

- 1) Picture PC
  - Available only for PC, BNC, DVI.
- 2) Contrast
  - Adjusts Contrast of the selected display.
- 3) Brightness
  - Adjusts Brightness of the selected display.
- 4) Red
  - Adjusts red Color of the selected display.
- 5) Green
  - Adjusts green Color of the selected display.
- 6) Blue
  - Adjusts blue Color of the selected display.

- ▣ **This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.**
- ▣ **The Input source of MagicNet works only on MagicNet model.**

## 8. Settings Control - Audio

1. Click Settings of the main icons and the Settings Control screen appears.



- ▣ Info Grid shows some basic information necessary to Settings Control. When each function is selected, the set value of the selected function is displayed in the slide.

When Select All is selected, the default value (50) returns.  
Changing a value in this screen will automatically change the mode to "CUSTOM."

- 1) Audio
  - Controls audio settings for all input sources.
- 2) Bass
  - Adjusts Bass of the selected display.
- 3) Treble
  - Adjusts Treble of the selected display.
- 4) Balance
  - Adjusts Balance of the selected display.
- 5) Dolby Virtual
  - Dolby Virtual Sound On/Off of the selected display.
- 6) BBE
  - BBE Sound On/Off of the selected display.
- 7) Sound Select
  - Select either Main or Sub when PIP is On.

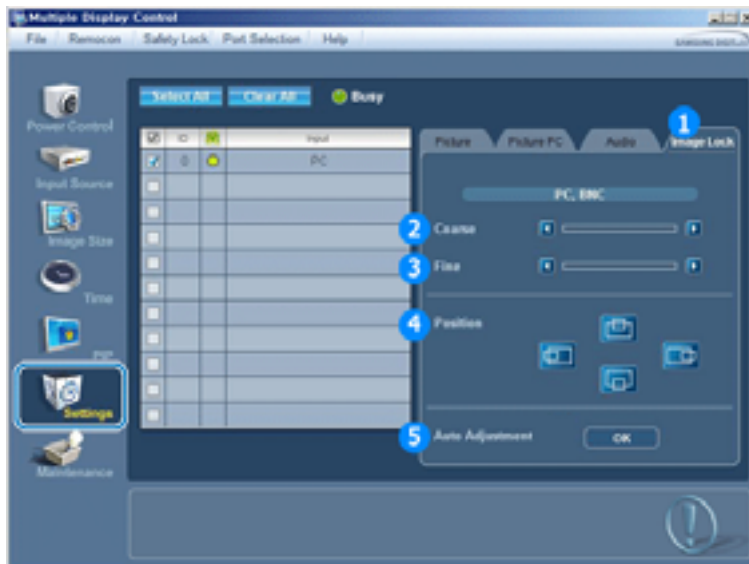
■ **This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.**

■ **The Input source of MagicNet works only on MagicNet model.**

---

## 8. Settings Control - Image Lock

1. Click Settings of the main icons and the Settings Control screen appears.



■ **Info Grid shows some basic information necessary to Settings Control.**

- 1) Image Lock
  - Available only for PC, BNC.
- 2) Coarse
  - Adjusts Coarse of the selected display.
- 3) Fine
  - Adjusts Fine of the selected display.
- 4) Position
  - Adjusts Position of the selected display.
- 5) Auto Adjustment
  - Self-Adjust to the incoming PC signal.

■ **Settings Control is available only for the displays for which the power status is ON.**

■ **The Input source of MagicNet works only on MagicNet model.**

---

## 9. Maintenance Control - Lamp Control

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



▮ An "Info Grid" showing several basic data items appears.

1) Maintenance

- Allows Maintenance Control for all input sources.

2) Auto Lamp Control

- Automatically adjusts the backlight of the selected display at a specified time.

- The Auto Lamp Control automatically turns off if you adjust using the Manual Lamp Control.

3) Manual Lamp Control

- Allows you to adjust the backlight of the selected display regardless of the time.

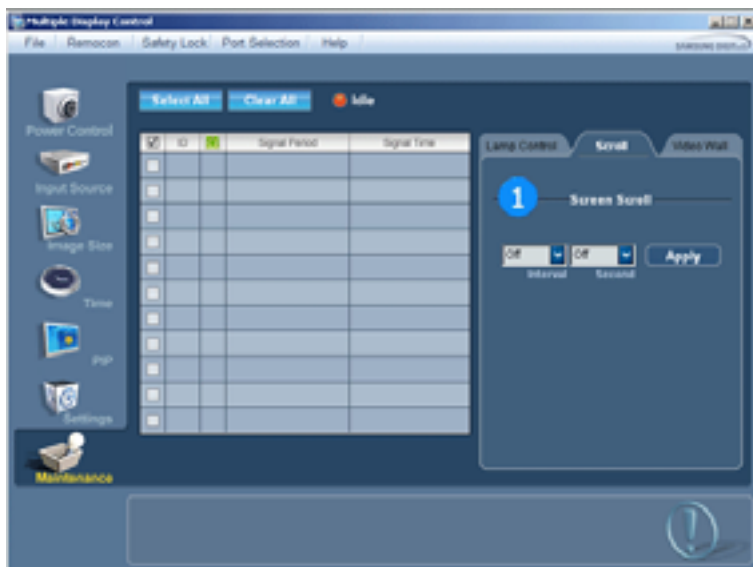
The Auto Lamp Control automatically turns off if you adjust using the Manual Lamp Control function.

▮ **The Maintenance Control feature is available only for the displays whose power status is ON.**

▮ **The Input source of MagicNet works only on MagicNet model.**

## 10. Maintenance Control - Scroll

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



1) Screen Scroll

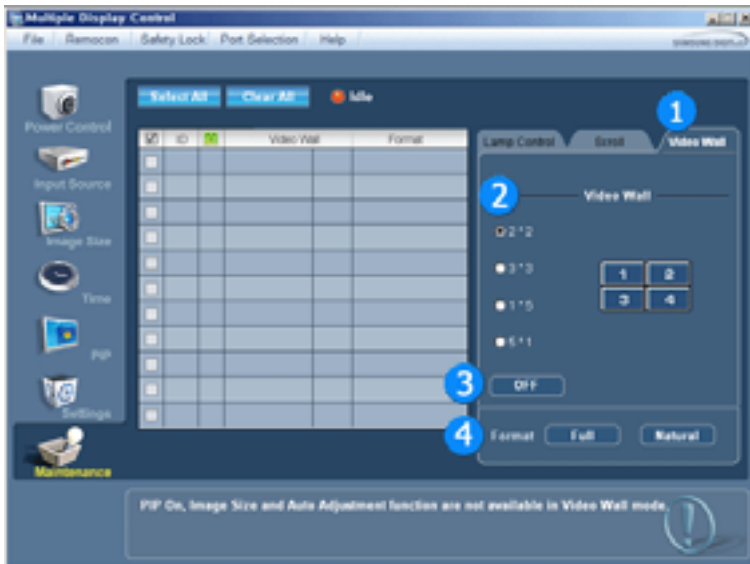
Eliminates the afterimages that can result when the selected display stays in Pause mode for an extended period of time. You can set the repeat cycle timer by selecting the "Interval" by hour and "Second" by second.

▮ **The Maintenance Control feature is available only for the displays whose power status is ON.**

▮ **The Input source of MagicNet works only on MagicNet model.**

## 11. Maintenance Control - Video Wall

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



1) Video Wall

- A Video Wall is a set of video screens that are connected together, so that each screen shows a part of the whole picture or so that the same picture is repeated on each screen.

2) Screen Divider

- The screen can be divided into.  
You can select a number of screens with a different layout when dividing.

- Select a mode from Screen Divider.
- Select a display from Display Selection.
- The place will be set up by pressing a number in the selected mode..

- 2\*2
 

1	2
3	4
- 3\*3
 

1	2	3
4	5	6
7	8	9
- 1\*5
 

1	2	3	4	5
---	---	---	---	---
- 5\*1
 

1
2
3
4
5

3) On / Off

- Turns on/off the Video Wall function of the selected display.

4) Format

- The format can be selected to see a divided screen.

- Full
 

Multiple Display Control
--------------------------------
- Natural
 

Multiple Display Control
--------------------------------

- The Maintenance Control function is available only for the displays where the power status is ON.
  - The Input source of MagicNet works only on MagicNet model.
- 

## 12. Troubleshooting

1. The display you wish to control does not appear on the Power Control Info Grid
  - Check the connection of RS232C. (Check if it is properly connected to the Com1 port)
  - Check the displays to see if any of the other displays connected have the same ID. If more than one displays have the same ID, those displays are not properly detected by the program due to data conflict.
  - Check if the Display Set ID is a number between 1 and 10. (Adjust using the Display menu)

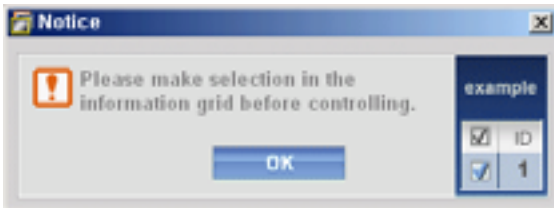


A Display Set ID must be a value between 1 and 10.  
If the value is out of the range, the MDC system cannot control the display.

2. The display you wish to control does not appear on the other Control Info Grids
  - Check to see if the display power is ON. (You can check this in Power Control Info Grid)
  - Check if you can change the input source of the display.
3. The dialogue box appears repeatedly.
  - Check to see if the display you wish to control is selected.
4. Both On Timer and Off Timer have been set but different time is showing.
  - Apply current time to synchronize the display clocks.
5. The remote may not function properly when you turn off the remote Function, disconnect the RS-232C cable, or exit the program in an Irregular manner. Rerun the program and turn the remote function again to Restore normal functions.



This program may malfunction due to problems in communication circuits or interference from electronic appliances nearby.



---

## 13. Settings Value Display In Multiple Display Mode

- When there are more than one displays connected, the settings values are displayed as follows.
1. No selection: Displays the Factory Default Value.
  2. Selected one display: Fetches and displays the settings value for the selected display.
  3. Selected one display (ID1) and add another display (ID3): The program, which was displaying the settings value of ID 1, fetches and displays the value of ID3.
  4. Selected all sets using Select All: Returns to the Factory Default Value.
- 





One of the recent problems in using a computer is that the color of the images printed out by a printer or other images scanned by a scanner or a digital camera are not the same as those shown on the monitor.

The Natural Color S/W is the very solution for this problem. It is a color administration system developed by Samsung Electronics in association with Korea Electronics & Telecommunications Research Institute (ETRI).

This system is available only for Samsung monitors and makes the color of the images on the monitor the same as the printed or scanned images.

For more information, refer to Help (F1) in the software program.

#### **How to install the Natural Color software**

Insert the CD included with the Samsung monitor into the CD-ROM Drive. Then, the initial screen of the program Natural Color will be executed. Click Natural Color on the initial screen to install the Natural Color software.

To install the program manually, insert the CD included with the Samsung monitor into the CD-ROM Drive, click the [Start] button of Windows and then select [Execute].

Enter D:\color\eng\setup.exe and then press the <Enter> key.

(If the drive where the CD is inserted is not D:\, enter the applicable drive.)

#### **How to delete the Natural Color software program**

Select "**Setting**" / "**Control Panel**" on the "**Start**" menu and then double-click "**Add/Delete a program**".

Select Natural Color from the list and then click the [Add/Delete] button.



# SyncMaster 460Pn





Input | Picture | Sound | Setup | Multi Control | Direct Functions | MagicNet | MagicNet (SERVER)

## Input



Available Mode **P** : PC / BNC / DVI **A** : AV **S** : S-Video **C** : Component **M** : MagicNet

OSD	Description	Play
Source List	<p>Use to select PC, BNC or other external input sources connected to the Monitor. Use to select the screen of your choice.</p> <p><b>- The direct button on the remote control is 'SOURCE' button.</b></p> <p> <b>The PIP turns off when the monitor is switched to an external source.</b></p> <ol style="list-style-type: none"> <li>1) PC</li> <li>2) BNC</li> <li>3) DVI</li> <li>4) AV</li> <li>5) S-Video</li> <li>6) Component</li> <li>7) MagicNet</li> </ol>	
PIP	When external A/V devices such as VCRs or DVDs are connected to the monitor, PIP allows you to watch video from	

those devices in a small window super-imposed on the PC Video signal. (Off/On)



**More than one PIP couldn't be overlapped on screen as BNC and the component use the same terminal.**

**1) PIP**

- The direct button on the remote control is '**PIP**' button.

Off

On

: Turn the PIP Screen on or off.

**2) Source**

- The direct button on the remote control is '**SOURCE**' button.

**PC / DVI**

: AV / S-Video / Component Mode

**BNC**

: AV / S-Video Mode

**AV / S-Video**

: PC / BNC / DVI Mode

**Component**

: PC / DVI Mode

: Select the input source for the PIP.

**3) Swap**

- The direct button on the remote control is '**SWAP**' button.

: Swapping the contents of the PIP and main image.

The image in the PIP window will appear on the main screen, and the main screen image will appear in the PIP window.

**4) Size**

- The direct button on the remote control is '**SIZE**' button.

: Change the Size of the PIP window.

If you select in Size, Position and Transparency will not be activated.

**5) Position**

: Change the Position of the PIP window.

**6) Transparency**

**High**

**Medium**

**Low**

**Opaque**

: Adjust the Transparency of PIP windows.

**Available Mode : PIP**



**Edit Name**

Name the input device connected to the input jacks to make your input source selection easier.



**MagicNet couldn't be renamed.**

**1) PC**

**2) BNC**

**3) DVI**

**4) AV**

**5) S-Video**

**6) Component**











# Picture

## PC / BNC / DVI Mode







Available Mode **P** : PC / BNC / DVI **A** : AV **S** : S-Video **C** : Component **M** : MagicNet











OSD	Description	Play
<b>MagicBright™</b>	<p>MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching.</p> <p>Currently four different modes are available: Entertain, Internet, Text and Custom.</p> <p>Each mode has its own pre-configured brightness value. You can easily select one of four settings by simply pressing the MagicBright™ control button.</p> <p><b>- The direct button on the remote control is 'M/B' button.</b></p> <p><b>1) Entertain</b> : High brightness For watching motion pictures such as a DVD or VCD.</p> <p><b>2) Internet</b> : Medium brightness For working with a mixture of images such as text and graphics.</p> <p><b>3) Text</b> : Normal brightness For documentations or works involving heavy text.</p> <p><b>4) Custom</b> Although the values are carefully chosen by our engineers, the pre-configured values may not be comfortable to your eyes depending on your taste. If this is the case, adjust the brightness and contrast by using the OSD menu.</p>	
<b>Custom</b>	<p>You can use the on-screen menus to change the contrast and brightness according to personal preference.</p> <p><b>1) Contrast</b> : Adjust the Contrast.</p> <p><b>2) Brightness</b> : Adjust the Brightness.</p>	
	<p><b>If you adjust picture using Custom function, MagicBright will turn to Custom mode.</b></p>	
<b>Color Tone</b>	<p>The tone of the color can be changed.</p> <p><b>1) Cool</b> <b>2) Normal</b> <b>3) Warm</b></p>	

	<b>4) Custom</b>	
<b>Color Control</b>	Adjust the individual R, G, B color controls. <b>1) Red</b> <b>2) Green</b> <b>3) Blue</b>	
 <b>If you adjust picture using Color Control function, Color Tone will turn to Custom mode.</b>		
<b>Image Lock</b>	Image Lock is used to fine-tune and get the best image by removing noise that creates unstable images with jitter and shimmer. If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again. <b>1) Coarse</b> : Removes noise such as vertical stripes. Coarse adjustment may move the screen image area. You may relocate it to the center using the horizontal control menu. <b>2) Fine</b> : Removes noise such as horizontal stripes. If the noise persists even after fine tuning, repeat it after adjusting the frequency (clock speed). <b>3) Position</b> : Adjusts the screen location horizontally and vertically.	<b>1) Coarse</b> / Fine <b>3) Position</b> 
<b>Auto Adjustment</b>	The values of Fine, Coarse, position are adjusted automatically. If you change resolution in the control panel, auto function will be executed. - <b>The direct button on the remote control is 'AUTO' button.</b>	
<b>Signal Balance</b>	Used to make up for the weak RGB signal which has been transmitted by a long signal cable. <b>1) Signal Balance</b> You can select with the signal control either On or Off. <b>2) Signal Control</b> You can adjust the R Phase, G Phase, B Phase, Gain and Sharpness manually.	<b>1) Signal Balance</b>  <b>2) Signal Control</b> 
<b>Size</b>	You can switch the Size. <b>1) 16:9</b> <b>2) 4:3</b>	
<b>PIP Picture</b>	You can adjust the PIP Screen Settings. <b>1) Contrast</b> : Adjusts the Contrast of the PIP window on the screen. <b>2) Brightness</b> : Adjusts the Brightness of the PIP window on the screen. <b>3) Sharpness</b> : Adjusts the difference between the lightest and darkest areas of the PIP window. <b>4) Color</b> : Adjusts the Color of the PIP window on the screen. <b>5) Tint</b> : Adds a natural tone to the PIP window. <b>Available Mode : PIP</b>	



Available Mode **P** : PC / BNC / DVI **A** : AV **S** : S-Video **C** : Component **M** : MagicNet













OSD	Description	Play
<b>Mode</b>	<p>The Monitor has four automatic picture settings ("Dynamic", "Standard", "Movie" and "Custom") that are preset at the factory.</p> <p>You can activate either Dynamic, Standard, Movie, or Custom. You can select "Custom" which automatically recalls your personalized picture settings.</p> <p><b>- The direct button on the remote control is 'P.MODE' button.</b></p> <ol style="list-style-type: none"> <li>1) <b>Dynamic</b></li> <li>2) <b>Standard</b></li> <li>3) <b>Movie</b></li> <li>4) <b>Custom</b></li> </ol>	
<b>Custom</b>	<p>You can use the on-screen menus to change the contrast and brightness according to personal preference.</p> <ol style="list-style-type: none"> <li>1) <b>Contrast</b> : Adjusts the Contrast.</li> <li>2) <b>Brightness</b> : Adjusts the Brightness.</li> <li>3) <b>Sharpness</b> : Adjust the picture sharpness.</li> <li>4) <b>Color</b> : Adjust the picture color.</li> <li>5) <b>Tint</b> ( Available in AV/S-Video Mode Only ) : Adds a natural tone to the display.</li> </ol>	
<b>Color Tone</b>	<p>The tone of the color can be changed. The individual color components are also user adjustable.</p> <ol style="list-style-type: none"> <li>1) <b>Cool2</b></li> <li>2) <b>Cool1</b></li> <li>3) <b>Normal</b></li> <li>4) <b>Warm1</b></li> <li>5) <b>Warm2</b></li> </ol>	
<b>Size</b>	<p>You can switch the Size.</p> <ol style="list-style-type: none"> <li>1) <b>16:9</b></li> <li>2) <b>Panorama</b></li> <li>3) <b>Zoom 1</b></li> <li>4) <b>Zoom 2</b></li> <li>5) <b>4:3</b></li> </ol> <p>- ZOOM1, ZOOM2, Panorama are not available in 1080i(or over 720p) of DTV.</p>	
<b>Digital NR</b>	<p>- Digital Noise Reduction.</p> <p>You can turn the Noise Elimination feature Off/On.</p> <p>The Digital Noise Elimination feature allows you to enjoy</p>	

	clearer and crisper images. <ul style="list-style-type: none"> <li> Off</li> <li> On</li> </ul>	
<b>Film Mode</b>	You can turn Film Mode Off/On. The Film Mode feature offers you a theater-quality viewing experience. <ul style="list-style-type: none"> <li> Off</li> <li> On</li> </ul>	
<b>DNle Demo</b>	- Digital Natural Image engine Samsung's new technology brings you more detailed images with contrast and white enhancement and 3D noise reduction. A New image compensation algorithm gives brighter, clearer images to our customers. DNle technology will match every signal to your eyes.  You can compare a screen with DNle to that without DNle. The left half will show an image with DNle while the right half will display the image without DNle. <b>This monitor supports the DNle feature by default.</b> <ul style="list-style-type: none"> <li> Off : Switches off the DNle Demo mode.</li> <li> On : Switches on the DNle Demo mode.</li> </ul>	
<b>PIP Picture</b>	You can adjust the PIP Screen Settings. <b>1) Contrast</b> : Adjusts the Contrast of the PIP window on the screen. <b>2) Brightness</b> : Adjusts the Brightness of the PIP window on the screen.  <b>Available Mode : PIP</b>	

## Sound

















OSD	Description	Play
<b>Mode</b>	<p>The Monitor has a built-in high fidelity stereo amplifier.</p> <p><b>1) Standard</b> : Choose Standard for the standard factory settings.</p> <p><b>2) Music</b> : Choose Music when watching music videos or concerts.</p> <p><b>3) Movie</b> : Choose Movie when viewing movies.</p> <p><b>4) Speech</b> : Choose Speech when watching a show that is mostly dialogue (i.e., news).</p> <p><b>5) Custom</b> : Choose Custom if you want to adjust the settings according to personal preference.</p>	
<b>Custom</b>	<p>The sound settings can be adjusted to suit your personal preference.</p> <p><b>1) Bass</b> : Emphasize low frequency audio.</p> <p><b>2) Treble</b> : Emphasize high frequency audio.</p> <p><b>3) Balance</b> : Allows you to adjust the sound balance between the left and right speakers. - <b>You can hear the sound even when the sound value is set to 0.</b></p>	
<b>Dolby Virtual</b>	<p>Dolby Virtual Sound Off/On (Dolby Virtual simulates the effect of the Dolby Surround sound system, recreating the movie-theatre or concert-hall- quality sound.)</p> <p> Off</p> <p> On</p>	
<b>BBE</b>	<p><b>The direct button on the remote control is 'BBE' button.</b></p> <p>BBE (Bass Booster Effect) recreates the natural sound and improves sound clarity through boosting high and low range frequencies. As a result, high sounds are clearer, brilliant and finely detailed while low sounds are tight, well-defined and harmonically rich.</p> <p> Off</p> <p> On</p>	
 <b>BBE and Dolby Virtual cannot be functioned at the same time.</b>		
<b>Sound Select</b>	<p>You can select either Main or Sub when PIP is On.</p> <p> Main</p> <p> Sub</p> <p><b>Available Mode : PIP</b></p>	





























## Setup



Available Mode **P** : PC / BNC / DVI **A** : AV **S** : S-Video **C** : Component **M** : MagicNet

OSD	Description	Play
<b>Time</b>	<p>Use to choose one of 4 time settings, Clock Set, Sleep Timer, On Timer, and Off Timer.</p> <p><b>1) Clock Set</b> : Current Time Setting.</p> <p><b>2) Sleep Timer</b> : Use to set the Monitor to turn off automatically in certain minutes. (Off, 30, 60, 90, 120, 150, 180)</p> <p><b>3) On Timer</b> : Use to set the Monitor to turn on automatically at a preset time. Use to control the mode, volume level at the time the monitor turns on automatically.</p> <p><b>4) Off Timer</b> : Use to set the monitor to turn off automatically at a preset time.</p> <p> When you select turning <b>Yes</b> the <b>On Timer</b> or <b>Off Timer</b> when <b>Clock Set</b> is undefined, a guiding message pops up: <b>"Set the clock first."</b></p>	<p>1) Clock Set </p> <p>2) Sleep Timer </p> <p>3) On Timer </p> <p>4) Off Timer </p> <p><b>PASCM</b></p>
<b>Lamp Control</b>	<p>Used to adjust inverter lamp in order to reduce energy consumption.</p>	<p></p> <p><b>PASCM</b></p>
<b>Language</b>	<p>You can choose one of 11 languages.</p> <ul style="list-style-type: none"> <li>English, Deutsch, Español, Français, Italiano, Svenska, 日本語, 中国語, Русский, 한국어, Português</li> </ul> <p> The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.</p>	<p></p> <p><b>PASCM</b></p>
<b>Menu Transparency</b>	<p>Changes the opaqueness of the background of the OSD.</p> <p>1) High 2) Medium 3) Low 4) Opaque</p>	<p></p> <p><b>PASCM</b></p>
<b>Safety Lock PIN</b>	<p>You can change the password.</p>	<p></p> <p><b>PASCM</b></p>
<b>Reset</b>	<p>Picture parameters are replaced with the factory default values.</p> <p>1) Image Reset 2) Color Reset</p>	<p>1) Image Reset </p> <p>2) Color Reset </p>



		PM
<p><b>Video Wall</b></p>	<p>A Video Wall is a set of video screens that are connected together, so that each screen shows a part of the whole picture or so that the same picture is repeated on each screen.</p> <p><b>1) Video Wall</b> : Turns Off/On the Video Wall function of the selected display.</p> <ul style="list-style-type: none"> <li> Off</li> <li> On</li> </ul> <p><b>2) Format</b> : The format can be selected to see a divided screen.</p> <ul style="list-style-type: none"> <li> Full Provides a full screen without any margins.</li> <li> Natural Displays a natural image with the original aspect ratio intact.</li> </ul> <p><b>3) Screen Divider</b> : The screen can be divided into.</p> <p>You can select a number of screens with a different layout when dividing.</p> <ul style="list-style-type: none"> <li>• Select a mode from Screen Divider.</li> <li>• Select a display from Display Selection.</li> <li>• The place will be set up by pressing a number in the selected mode.</li> </ul> <ul style="list-style-type: none"> <li> 2*2</li> <li> 3*3</li> <li> 4*4</li> <li> 1*5</li> <li> 5*1</li> </ul> <p> <b>When Video Wall is running, the PIP, Auto Adjustment, Image Lock, and Size functions are not available. Launching Video Wall while PIP is running, will switch PIP Off. Video Wall does not operate in MagicNet mode.</b></p>	<p>1) Video Wall </p> <p>2) Format </p> <p>3) Screen Divider  </p>
<p><b>Resolution Select</b></p>	<p>When the picture is not displayed properly on the screen when setting the graphics card resolution of the computer to 1024 x 768 @ 60Hz, 1280 x 768 @ 60Hz, 1360 x 768 @ 60Hz or 1366 x768 @ 60Hz, by using this function(Resolution Select) you can have the picture displayed on the screen in the specified resolution.</p> <ul style="list-style-type: none"> <li> Off</li> <li> 1024 X 768</li> <li> 1280 X 768</li> <li> 1360 X 768</li> <li> 1366 X 768</li> </ul> <p> <b>Selecting the menu is only allowed when the graphics resolution is set to 1024 x 768 @ 60Hz, 1280 x 768 @ 60Hz, 1360 x 768 @ 60Hz or 1366 x768 @ 60Hz.</b></p>	<p></p>
<p><b>Screen Scroll</b></p>	<p>The Screen Scroll function is used to prevent afterimages that may appear when a still picture is displayed on the screen over a long time.</p> <ul style="list-style-type: none"> <li>- The Screen Scroll function scrolls the screen for the specified period of time.</li> <li>- This function is not available when the power is turned off.</li> </ul> <p><b>1) Auto Scroll</b> : Determines whether to turn the Screen Scroll function On or Off.</p> <ul style="list-style-type: none"> <li> Off</li> <li> On</li> </ul> <p><b>2) Interval</b> : Determines the time interval to run the Screen Scroll operation. (1~10 Hours) The time is calculated on the basis of the power on time. By default, the time is set to 10 hours.</p> <ul style="list-style-type: none"> <li> 1~10 Hours</li> </ul>	<p>1) Auto Scroll </p> <p>2) Interval </p> <p>3) Second  </p>

### 3) Second

: Determines the time period to run the Screen Scroll operation.  
(1~5 Seconds)  
By default, the time is set to 5 seconds.

1~5 Seconds

## Multi Control








Available Mode **P**: PC / BNC / DVI **A**: AV **S**: S-Video **C**: Component **M**: MagicNet

OSD	Description	Play
Multi Control	Assigns individual ID to the SET. <b>1) ID Setup</b> : Assigning distinctive IDs to the SET. <b>2) ID Input</b> : Use to select the transmitter functions of the individual SET. Only the SET whose ID corresponds to the transmitter setting becomes activated.	1) ID Setup 2) ID Input PASC M

## Direct Functions



Available Mode **P** : PC / BNC / DVI **A** : AV **S** : S-Video **C** : Component **M** : MagicNet

OSD	Description	Play
<b>MAGICNET</b>	Move to the MagicNet OSD screen.	
<b>MDC</b>	Move to the Multi Control OSD screen.	
<b>LOCK</b>	<p>Set the Safety Lock function.</p> <p><b>1) Lock On</b> : It will be locked on.</p> <p><b>2) Lock Off</b> : It will be locked off.</p> <p><b>When setting the Lock function, you can only operate power and lock buttons on the remote control and set.</b></p> <p> The preset password on the monitor is "0000".</p>	<p>1) Lock On </p> <p>2) Lock Off </p>









## MagicNet













- The operating system for this set supports English only so the other languages might be corrupt on screen.
- For MagicNet, the remote control is available for its operation. However, you are recommended to use a separate USB keyboard.
- For MagicNet with the Device mode, moving device surrounding while booting may cause errors. Set up device surrounding only if monitor turns on or doing well.
- Do not unplug the LAN cable used for the network (ex: video display). Otherwise, the program (MagicNet) may stop. If you do unplug the cable, restart the system.
- Do not unplug the LAN cable used by an USB device (ex: video display). Otherwise, the program (MagicNet) may stop.
- To access other sources, press the SOURCE button in MagicNet.
- The preset password on the monitor is "000000".
- The server program's Power-On option works only if the monitor's power is completely shut off.  
Please make sure not to use the Power-On option when the monitor is in the process of shutting up since it can possibly cause systemetic error on the monitor.

In the OSD image of MagicNet, Network mode is the same as Device.

- When using MagicNet with MagicNet Server Program : execute Network mode.
- When using MagicNet with the device directly connected to monitor : execute Device mode.

OSD	Description	Play
<b>Photo</b>	JPEG, BMP file format is supported. <b>1) Auto</b> : Automatically fits the image to the window. <b>/ Original</b> : Shows the properties of an original file. <b>2) Slide Show</b> : Displays the properties of the original file as they are. <b>3) Interval</b> : Controls the time intervals between image files for a slide show. (5 Sec, 10 Sec, 20 Sec, 30 Sec, 60 Sec) <b>4) Rotation</b> : Displays an image file by turning it clockwise by 90 . <b>5) Zoom</b> : Displays an enlarged picture. <b>6) Close</b> : Closes Menu for image control.	1) Auto/Original  2) Slide Show  3) Interval  4) Rotation  5) Zoom  6) Close 
<b>Music</b>	MP3 file format is supported.	
<b>Movie</b>	AVI, MPEG1/2, DivX 4.x, DivX 5.x file format is supported. <b>1) Play</b> : Plays a movie file.	1) Play 

	<p><b>2) Full Size</b> : Plays a movie file in full screen.</p>	<p>2) Full Size </p>
<b>OFFICE/HTML</b>	PPT(Power Point), DOC(MS Word), XLS(MS Excel), PDF, HTML, HTM files are displayed.	
<b>Internet</b>	Connects to the Internet.	
<b>Setup</b>	<p>You can set various functions in MagicNet mode. You must enter the password to access Setup mode.</p> <ul style="list-style-type: none"> <li>• The password should be between 6 and 12 characters in numeric format. (You should enter a password between 6 and 12 characters in numeric format)</li> <li>• If you enter the wrong password three times, the setup configuration is reset and a warning message from the server appears.</li> <li>• If you forget the password, enter Info, 8, 2 and 4 on the remote control to initialize the password. This will reset the previous settings of Setup mode.</li> </ul> <p><b>1) Schedule View</b> : Displays a schedule.</p> <p><b>2) TCP/IP</b> : You can change the TCP/IP settings.</p> <p><b>3) Homepage</b> : You can change the Internet primary address.</p> <p><b>4) Network Setup</b> : You can modify the network settings.</p> <p><b>5) Change Password</b> : You can change the password.</p> <p><b>6) Keyboard</b> : In MagicNet you can select a preferred keyboard language. When the selection is over, MagicNet will reboot, and the selected keyboard language can be used.</p> <p> <b>This function recognizes the keyboard input in the selected language. The program language itself does not change into the selected language.</b></p>	<p>1) Schedule View </p> <p>2) TCP/IP </p> <p>3) Homepage </p> <p>4) Network Setup </p> <p>5) Change Password </p> <p>6) Keyboard </p>

# SyncMaster 460P





Input | Picture | Sound | Setup | Multi Control | Direct Functions

## Input



Available Mode    **P** : PC / BNC / DVI    **A** : AV    **S** : S-Video    **C** : Component

OSD	Description	Play
Source List	<p>Use to select PC, BNC or other external input sources connected to the Monitor. Use to select the screen of your choice. <b>- The direct button on the remote control is 'SOURCE' button.</b></p> <p> <b>The PIP turns off when the monitor is switched to an external source.</b></p> <ol style="list-style-type: none"> <li>1) PC</li> <li>2) BNC</li> <li>3) DVI</li> <li>4) AV</li> <li>5) S-Video</li> <li>6) Component</li> </ol>	
PIP	<p>When external A/V devices such as VCRs or DVDs are connected to the monitor, PIP allows you to watch video from those devices in a small window super-imposed on the PC</p>	



Video signal. (Off/On)



**More than one PIP couldn't be overlapped on screen as BNC and the component use the same terminal.**

### 1) PIP

- The direct button on the remote control is **'PIP'** button.

Off

On

: Turn the PIP Screen on or off.

### 2) Source

- The direct button on the remote control is **'SOURCE'** button.

**PC / DVI**

: AV / S-Video / Component Mode

**BNC**

: AV / S-Video Mode

**AV / S-Video**

: PC / BNC / DVI Mode

**Component**

: PC / DVI Mode

: Select the input source for the PIP.

### 3) Swap

- The direct button on the remote control is **'SWAP'** button.

: Swapping the contents of the PIP and main image.

The image in the PIP window will appear on the main screen, and the main screen image will appear in the PIP window.

### 4) Size

- The direct button on the remote control is **'SIZE'** button.

: Change the Size of the PIP window.

If you select in Size, Position and Transparency will not be activated.

### 5) Position

: Change the Position of the PIP window.

### 6) Transparency

**High**

**Medium**

**Low**

**Opaque**

: Adjust the Transparency of PIP windows.

**Available Mode : PIP**



### Edit Name

Name the input device connected to the input jacks to make your input source selection easier.

1) PC

2) BNC

3) DVI

4) AV

5) S-Video

6) Component



## Picture

- PC / BNC / DVI Mode



Available Mode **P** : PC / BNC / DVI **A** : AV **S** : S-Video **C** : Component






OSD	Description	Play
<b>MagicBright™</b>	<p>MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching.</p> <p>Currently four different modes are available: Entertain, Internet, Text and Custom.</p> <p>Each mode has its own pre-configured brightness value. You can easily select one of four settings by simply pressing the MagicBright™ control button.</p> <p><b>- The direct button on the remote control is 'M/B' button.</b></p> <p><b>1) Entertain</b> : High brightness For watching motion pictures such as a DVD or VCD.</p> <p><b>2) Internet</b> : Medium brightness For working with a mixture of images such as text and graphics.</p> <p><b>3) Text</b> : Normal brightness For documentations or works involving heavy text.</p> <p><b>4) Custom</b> Although the values are carefully chosen by our engineers, the pre-configured values may not be comfortable to your eyes depending on your taste. If this is the case, adjust the brightness and contrast by using the OSD menu.</p>	
<b>Custom</b>	<p>You can use the on-screen menus to change the contrast and brightness according to personal preference.</p> <p><b>1) Contrast</b> : Adjust the Contrast.</p> <p><b>2) Brightness</b> : Adjust the Brightness.</p>	
<b>If you adjust picture using Custom function, MagicBright will turn to Custom mode.</b>		
<b>Color Tone</b>	<p>The tone of the color can be changed.</p> <p><b>1) Cool</b> <b>2) Normal</b> <b>3) Warm</b> <b>4) Custom</b></p>	
<b>Color Control</b>	<p>Adjust the individual R, G, B color controls.</p> <p><b>1) Red</b> <b>2) Green</b></p>	



3) Blue







If you adjust picture using Color Control function, Color Tone will turn to Custom mode.











<p><b>Image Lock</b></p>	<p>Image Lock is used to fine-tune and get the best image by removing noise that creates unstable images with jitter and shimmer. If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again.</p> <p><b>1) Coarse</b> : Removes noise such as vertical stripes. Coarse adjustment may move the screen image area. You may relocate it to the center using the horizontal control menu.</p> <p><b>2) Fine</b> : Removes noise such as horizontal stripes. If the noise persists even after fine tuning, repeat it after adjusting the frequency (clock speed).</p> <p><b>3) Position</b> : Adjusts the screen location horizontally and vertically.</p>	<p>1) Coarse / Fine 3) Position </p>
<p><b>Auto Adjustment</b></p>	<p>The values of Fine, Coarse, position are adjusted automatically. If you change resolution in the control panel, auto function will be executed. <b>- The direct button on the remote control is 'AUTO' button.</b></p>	
<p><b>Signal Balance</b></p>	<p>Used to make up for the weak RGB signal which has been transmitted by a long signal cable.</p> <p><b>1) Signal Balance</b> You can select with the signal control either On or Off.</p> <p><b>2) Signal Control</b> You can adjust the R Phase, G Phase, B Phase, Gain and Sharpness manually.</p>	<p>1) Signal Balance 2) Signal Control </p>
<p><b>Size</b></p>	<p>You can switch the Size.</p> <p><b>1) 16:9</b> <b>2) 4:3</b></p>	
<p><b>PIP Picture</b></p>	<p>You can adjust the PIP Screen Settings.</p> <p><b>1) Contrast</b> : Adjusts the Contrast of the PIP window on the screen.</p> <p><b>2) Brightness</b> : Adjusts the Brightness of the PIP window on the screen.</p> <p><b>3) Sharpness</b> : Adjusts the difference between the lightest and darkest areas of the PIP window.</p> <p><b>4) Color</b> : Adjusts the Color of the PIP window on the screen.</p> <p><b>5) Tint</b> : Adds a natural tone to the PIP window.</p> <p><b>Available Mode : PIP</b></p>	

● AV / S-Video / Component Mode



Available Mode    **P** : PC / BNC / DVI    **A** : AV    **S** : S-Video    **C** : Component

OSD	Description	Play
<b>Mode</b>	<p>The Monitor has four automatic picture settings ("Dynamic", "Standard", "Movie" and "Custom") that are preset at the factory.</p> <p>You can activate either Dynamic, Standard, Movie, or Custom. You can select "Custom" which automatically recalls your personalized picture settings.</p> <p><b>- The direct button on the remote control is 'P.MODE' button.</b></p> <ol style="list-style-type: none"> <li>1) <b>Dynamic</b></li> <li>2) <b>Standard</b></li> <li>3) <b>Movie</b></li> <li>4) <b>Custom</b></li> </ol>	
<b>Custom</b>	<p>You can use the on-screen menus to change the contrast and brightness according to personal preference.</p> <ol style="list-style-type: none"> <li>1) <b>Contrast</b> : Adjusts the Contrast.</li> <li>2) <b>Brightness</b> : Adjusts the Brightness.</li> <li>3) <b>Sharpness</b> : Adjust the picture sharpness.</li> <li>4) <b>Color</b> : Adjust the picture color.</li> <li>5) <b>Tint</b> ( Available in AV/S-Video Mode Only ) : Adds a natural tone to the display.</li> </ol>	
<b>Color Tone</b>	<p>The tone of the color can be changed. The individual color components are also user adjustable.</p> <ol style="list-style-type: none"> <li>1) <b>Cool2</b></li> <li>2) <b>Cool1</b></li> <li>3) <b>Normal</b></li> <li>4) <b>Warm1</b></li> <li>5) <b>Warm2</b></li> </ol>	
<b>Size</b>	<p>You can switch the Size.</p> <ol style="list-style-type: none"> <li>1) <b>16:9</b></li> <li>2) <b>Panorama</b></li> <li>3) <b>Zoom 1</b></li> <li>4) <b>Zoom 2</b></li> <li>5) <b>4:3</b></li> </ol> <p>- ZOOM1, ZOOM2, Panorama are not available in 1080i(or over 720p) of DTV.</p>	
<b>Digital NR</b>	<p>- Digital Noise Reduction.</p> <p>You can turn the Noise Elimination feature Off/On.</p> <p>The Digital Noise Elimination feature allows you to enjoy</p>	













	clearer and crisper images. <ul style="list-style-type: none"> <li> Off</li> <li> On</li> </ul>	
<b>Film Mode</b>	You can turn Film Mode Off/On. The Film Mode feature offers you a theater-quality viewing experience. <ul style="list-style-type: none"> <li> Off</li> <li> On</li> </ul>	
<b>DNle Demo</b>	- Digital Natural Image engine Samsung's new technology brings you more detailed images with contrast and white enhancement and 3D noise reduction. A New image compensation algorithm gives brighter, clearer images to our customers. DNle technology will match every signal to your eyes.  You can compare a screen with DNle to that without DNle. The left half will show an image with DNle while the right half will display the image without DNle. <b>This monitor supports the DNle feature by default.</b> <ul style="list-style-type: none"> <li> Off : Switches off the DNle Demo mode.</li> <li> On : Switches on the DNle Demo mode.</li> </ul>	
<b>PIP Picture</b>	You can adjust the PIP Screen Settings. <b>1) Contrast</b> : Adjusts the Contrast of the PIP window on the screen. <b>2) Brightness</b> : Adjusts the Brightness of the PIP window on the screen.  <b>Available Mode : PIP</b>	

[Input](#) | [Picture](#) | [Sound](#) | [Setup](#) | [Multi Control](#) | [Direct Functions](#)

## Sound










































Available Mode    **P** : PC / BNC / DVI    **A** : AV    **S** : S-Video    **C** : Component

OSD	Description	Play
<b>Mode</b>	<p>The Monitor has a built-in high fidelity stereo amplifier.</p> <p><b>1) Standard</b> : Choose Standard for the standard factory settings.</p> <p><b>2) Music</b> : Choose Music when watching music videos or concerts.</p> <p><b>3) Movie</b> : Choose Movie when viewing movies.</p> <p><b>4) Speech</b> : Choose Speech when watching a show that is mostly dialogue (i.e., news).</p> <p><b>5) Custom</b> : Choose Custom if you want to adjust the settings according to personal preference.</p>	
<b>Custom</b>	<p>The sound settings can be adjusted to suit your personal preference.</p> <p><b>1) Bass</b> : Emphasize low frequency audio.</p> <p><b>2) Treble</b> : Emphasize high frequency audio.</p> <p><b>3) Balance</b> : Allows you to adjust the sound balance between the left and right speakers. - You can hear the sound even when the sound value is set to 0.</p>	
<b>Dolby Virtual</b>	<p>Dolby Virtual Sound Off/On (Dolby Virtual simulates the effect of the Dolby Surround sound system, recreating the movie-theatre or concert-hall- quality sound.)</p> <p> Off</p> <p> On</p>	
<b>BBE</b>	<p><b>The direct button on the remote control is 'BBE' button.</b></p> <p>BBE (Bass Booster Effect) recreates the natural sound and improves sound clarity through boosting high and low range frequencies. As a result, high sounds are clearer, brilliant and finely detailed while low sounds are tight, well-defined and harmonically rich.</p> <p> Off</p> <p> On</p>	
<p> <b>BBE and Dolby Virtual cannot be functioned at the same time.</b></p>		
<b>Sound Select</b>	<p>You can select either Main or Sub when PIP is On.</p> <p> Main</p> <p> Sub</p> <p><b>Available Mode : PIP</b></p>	



Available Mode **P** : PC / BNC / DVI **A** : AV **S** : S-Video **G** : Component

OSD	Description	Play
<b>Time</b>	<p>Use to choose one of 4 time settings, Clock Set, Sleep Timer, On Timer, and Off Timer.</p> <p><b>1) Clock Set</b> : Current Time Setting.</p> <p><b>2) Sleep Timer</b> : Use to set the Monitor to turn off automatically in certain minutes. (Off, 30, 60, 90, 120, 150, 180)</p> <p><b>3) On Timer</b> : Use to set the Monitor to turn on automatically at a preset time. Use to control the mode, volume level at the time the monitor turns on automatically.</p> <p><b>4) Off Timer</b> : Use to set the monitor to turn off automatically at a preset time.</p> <p> When you select turning <b>Yes</b> the <b>On Timer</b> or <b>Off Timer</b> when <b>Clock Set</b> is undefined, a guiding message pops up: <b>"Set the clock first."</b></p>	<p>1) Clock Set </p> <p>2) Sleep Timer </p> <p>3) On Timer </p> <p>4) Off Timer </p> <p><b>PASC</b></p>
<b>Lamp Control</b>	<p>Used to adjust inverter lamp in order to reduce energy consumption.</p>	<p></p> <p><b>PASC</b></p>
<b>Language</b>	<p>You can choose one of 11 languages.</p> <ul style="list-style-type: none"> <li>English, Deutsch, Español, Français, Italiano, Svenska, 日本語, 中国語, Русский, 한국어, Português</li> </ul> <p> The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.</p>	<p></p> <p><b>PASC</b></p>
<b>Menu Transparency</b>	<p>Changes the opaqueness of the background of the OSD.</p> <p>1) High 2) Medium 3) Low 4) Opaque</p>	<p></p> <p><b>PASC</b></p>
<b>Safety Lock PIN</b>	<p>You can change the password.</p>	<p></p> <p><b>PASC</b></p>
<b>Reset</b>	<p>Picture parameters are replaced with the factory default values.</p> <p>1) Image Reset 2) Color Reset</p>	<p>1) Image Reset </p> <p>2) Color Reset </p>

<p><b>Video Wall</b></p>	<p>A Video Wall is a set of video screens that are connected together, so that each screen shows a part of the whole picture or so that the same picture is repeated on each screen.</p> <p><b>1) Video Wall</b> : Turns Off/On the Video Wall function of the selected display.</p> <ul style="list-style-type: none"> <li> Off</li> <li> On</li> </ul> <p><b>2) Format</b> : The format can be selected to see a divided screen.</p> <ul style="list-style-type: none"> <li> Full Provides a full screen without any margins.</li> <li> Natural Displays a natural image with the original aspect ratio intact.</li> </ul> <p><b>3) Screen Divider</b> : The screen can be divided into. You can select a number of screens with a different layout when dividing.</p> <ul style="list-style-type: none"> <li>• Select a mode from Screen Divider.</li> <li>• Select a display from Display Selection.</li> <li>• The place will be set up by pressing a number in the selected mode.</li> </ul> <ul style="list-style-type: none"> <li> 2*2</li> <li> 3*3</li> <li> 4*4</li> <li> 1*5</li> <li> 5*1</li> </ul> <p> <b>When Video Wall is running, the PIP, Auto Adjustment, Image Lock, and Size functions are not available. Launching Video Wall while PIP is running, will switch PIP Off.</b></p>	<p style="text-align: right;"><b>P</b></p> <p>1) Video Wall </p> <p>2) Format </p> <p>3) Screen Divider </p>
<p><b>Resolution Select</b></p>	<p>When the picture is not displayed properly on the screen when setting the graphics card resolution of the computer to 1024 x 768 @ 60Hz, 1280 x 768 @ 60Hz, 1360 x 768 @ 60Hz or 1366 x768 @ 60Hz, by using this function(Resolution Select) you can have the picture displayed on the screen in the specified resolution.</p> <ul style="list-style-type: none"> <li> Off</li> <li> 1024 X 768</li> <li> 1280 X 768</li> <li> 1360 X 768</li> <li> 1366 X 768</li> </ul> <p> <b>Selecting the menu is only allowed when the graphics resolution is set to 1024 x 768 @ 60Hz, 1280 x 768 @ 60Hz, 1360 x 768 @ 60Hz or 1366 x768 @ 60Hz.</b></p>	<p></p>
<p><b>Screen Scroll</b></p>	<p>The Screen Scroll function is used to prevent afterimages that may appear when a still picture is displayed on the screen over a long time.</p> <ul style="list-style-type: none"> <li>- The Screen Scroll function scrolls the screen for the specified period of time.</li> <li>- This function is not available when the power is turned off.</li> </ul> <p><b>1) Auto Scroll</b> : Determines whether to turn the Screen Scroll function On or Off.</p> <ul style="list-style-type: none"> <li> Off</li> <li> On</li> </ul> <p><b>2) Interval</b> : Determines the time interval to run the Screen Scroll operation. (1~10 Hours) The time is calculated on the basis of the power on time. By default, the time is set to 10 hours.</p> <ul style="list-style-type: none"> <li> 1~10 Hours</li> </ul>	<p>1) Auto Scroll </p> <p>2) Interval </p> <p>3) Second </p> <p></p>

### 3) Second

: Determines the time period to run the Screen Scroll operation.  
(1~5 Seconds)  
By default, the time is set to 5 seconds.



1~5 Seconds

Input | Picture | Sound | Setup | **Multi Control** | Direct Functions

## Multi Control



Available Mode    **P** : PC / BNC / DVI    **A** : AV    **S** : S-Video    **G** : Component

OSD	Description	Play
<b>Multi Control</b>	Assigns individual ID to the SET. <b>1) ID Setup</b> : Assigning distinctive IDs to the SET. <b>2) ID Input</b> : Use to select the transmitter functions of the individual SET. Only the SET whose ID corresponds to the transmitter setting becomes activated.	1) ID Setup  2) ID Input  <b>PASC</b>





Input | Picture | Sound | Setup | **Multi Control** | Direct Functions

## Direct Functions



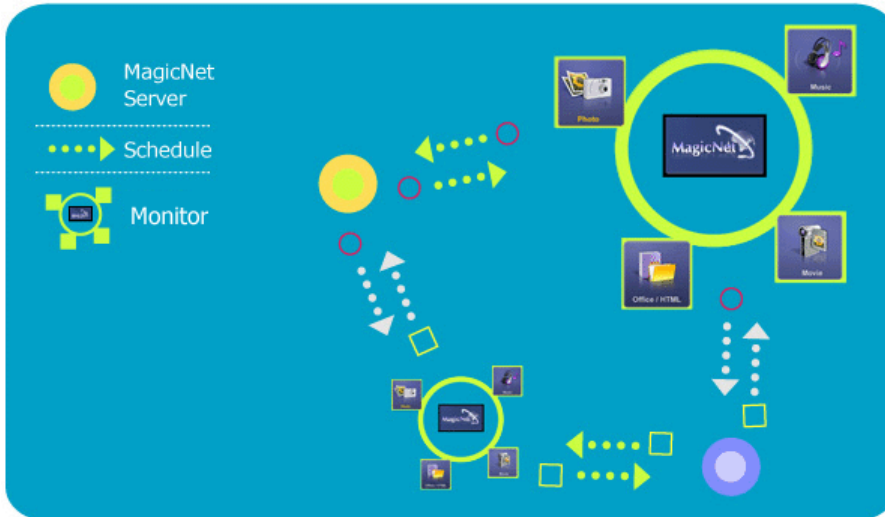


Available Mode    **P** : PC / BNC / DVI    **A** : AV    **S** : S-Video    **C** : Component

OSD	Description	Play
<b>MDC</b>	Move to the Multi Control OSD screen.	
<b>LOCK</b>	<p>Set the Safety Lock function.</p> <p><b>1) Lock On</b> : It will be locked on.</p> <p><b>2) Lock Off</b> : It will be locked off.</p> <p> <b>When setting the Lock function, you can only operate power and lock buttons on the remote control and set.</b></p> <p><b>The preset password on the monitor is "0000".</b></p>	<p>1) Lock On </p> <p>2) Lock Off </p>



## Introduction to MagicNet



**MagicNet** transmits media files (photo, audio and movie files) and office files (PowerPoint, Excel, Word, HTML and PDF files) existing on a server to monitors using the Ethernet network of the server/client architecture.

Several monitors can be connected to a server, and any file can be transmitted to any monitor over the network.

Files can be transmitted in two ways: the server sends files to the monitors after registering with the schedule; or the monitor searches for the files registered in the library of the server, sends the files to the monitors, and plays those files after receiving them via the network.

When more than one server is connected, you can select a server from the monitor and receive the schedule.

Each monitor is capable of accessing the Internet by itself.

Servers and monitors are connected over the network, and each server and monitor has a proper name to confirm each other.

Hence, the name of the server must be identical between the server and the clients for a normal connection.

That is, when a server's name is "MagicNet", only monitors set to "MagicNet" can be connected to this server.

When a server name does not exist under the name set in the monitor, it will wait until the server with the identical name appears.

However, when the auto connection function is on, it will try to connect to other servers, and will connect to the server that gives the first reply.



## Added Functions in MagicNet 2.0

### 1. Multiple Display Control (MDC)

The Multiple Display Control (MDC) is a newly added function in MagicNet 2.0, which can easily control several monitors from a PC simultaneously. MDC checks and controls the status of monitors that normally connect via the network.



### 2. Account Management

This function prevents a random user from freely using MagicNet, by placing limits on the operation of functions according to the account privilege.



### 3. Update

You can update a monitor's MagicNet from the server.  
However, this function only works when it is connected to a server/monitor with MagicNet Ver 2.0 or higher.



### 4. Controlling Local Storage Devices/USB File Control of Monitors

You can copy or delete files to a monitor's local storage device or via USB connected to the monitor.



### 5. Schedule Pause

This function pauses the ongoing schedule in the monitor, and is useful in the event of urgently needing to conduct other work.

Press the buttons in the order of **[+100]-[8]-[2]-[4]-[ENTER]** on the monitor with the remote control, and the schedule will pause temporarily.  
To resume the temporarily paused schedule, press the buttons in the order of **[PRE-CH]-[8]-[2]-[4]-[ENTER]** on the remote control.

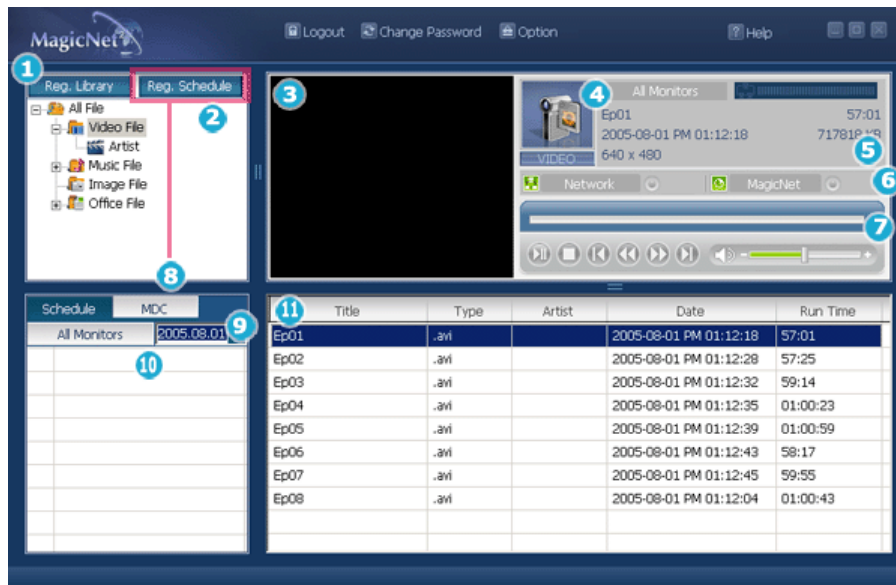


The specifications are subject to change without notice.  
MagicNet is a trademark of SAMSUNG ELECTRONICS CO., Inc.  
All other product trademarks mentioned in this document may be registered trademarks of their respective companies.

Schedule OSD



**The server program's Power-On option works only if the monitor's power is completely shut off. Please make sure not to use the Power-On option when the monitor is in the process of shutting up since it can possibly cause systemetic error on the monitor.**



- 1 Registering to the Library
- 2 Library List
- 3 Monitor Preview Window
- 4 Network
- 5 File Information
- 6 MagicNet/Network On/Off Status or Image Selection Menu
- 7 Play Control Tool
- 8 Registering / the Schedule
- 9 Date
- 10 Monitors connected via the Network
- 11 Fields Window

1 Registering to the Library

What is the Library?

The library consists of a collection of files which can be played from a monitor connected to the MagicNet program. The monitor can only play files with the supported formats registered in the library. The library only accepts files of the supported formats.

- Press the "Reg. Library" button to select files that can be registered to the library.
- It has been designed in such a way that only files playable by a monitor can be registered. The selected files are analyzed and the result is displayed.
- Files added to the library are first, automatically classified in the list (2) as movie, audio, photo and office files, and then they are further classified according to the file type.
- The Fields window (11) displays the registered files and their information.



## 2 Library List ▲Up

Files added to the library are first, automatically classified in the list as movie, audio, photo and office files, and then they are further classified according to their properties.

- All file : Displays all files which are registered in the library.
- Video File : Classified by actor (actress)
- Music File : Classified by musician and album
- Image File
- Office file : Classified by file type (PowerPoint, Excel, Word, PDF, HTML)



## 3 Monitor Preview Window ▲Up

This window is used either to preview a file (a movie or photo file) registered in the library list (2) and selected in the fields window (11), or to monitor a monitor.

### 1. Playing a file registered in the library

Click on a classification in the library list (2), and the files under the selected classification are displayed in the fields window (11). Then, double-click on a file in the fields window to play it. While playing, the file information is displayed in 5. Only audio, movie, and image files can be played. For office files, only file information is displayed in 5. However, if monitoring for a monitor is proceeding, the information being monitored is displayed instead.

### 2. Monitoring the selected monitor (Preview)

With the relevant monitor selected by a number 10 (the name of the monitor will be displayed in the field 4), the screen played by the currently-selected monitor will be displayed.

Audio, video and image files can be played, while only the file information appears for office files.

(In this case, only files registered in the library of the server will be played, and the local/USB files on the monitor will display only the basic information. In addition, when the output source of a monitor does not belong to MagicNet, information on the relevant output source will be displayed.)



## 4 Network ▲Up

The status bar next to the monitor name will display the overall network status (traffic) of all the monitors connected to the server. For example, assume that the network system capability is 100Mbps and a 100Mbps network card is installed in the server. If there is no network traffic used for other purposes, three monitors are connected, and each monitor uses 10Mbps of traffic, the progression will be indicated as about 30%.

- ! Server PC Environment: Recommended (CPU: 3GHz, RAM:512M, Ethernet: 100M)
- ! Network Environment: Local network not connected externally
  - ! Normal: Server PC network bandwidth: 50% ~ 60%
  - ! Max: Server PC network bandwidth: 90% or more (not recommended)
- ! For a LAN-connected environment, the connectable number of devices may be reduced depending on the availability of neighboring networks.



5 File Information ▲Up

This will display the name, date, size and resolution of the current file.



6 MagicNet/Network On/Off Status or Image Selection Menu ▲Up

Displays the On and Off status for the power and the network.  
Selecting an image file will change to the appropriate image menu.

Extended Image Menu



<b>Slide</b>	<ul style="list-style-type: none"> <li>When the files are selected in the library list : Sequentially displays the image files registered to the library.</li> <li>When monitoring information is being played from a schedule : Displays the image files registered to the schedule.</li> <li>When monitoring the information which the monitor user is selecting and playing : This function is disabled.</li> </ul>
<b>Previous</b>	<ul style="list-style-type: none"> <li>When the files are selected in the library list : Displays the previous file.</li> <li>When monitoring information is being played from a schedule : Displays the previous file. If a slide show is in progress, the slide show is stopped.</li> <li>When monitoring the information which the monitor user is selecting and playing : This function is disabled.</li> </ul>
<b>Next</b>	<ul style="list-style-type: none"> <li>When the files are selected in the library list : Displays the next file.</li> <li>When monitoring information is being played from a schedule : Displays the next file. If a slide show is in progress, the slide show is stopped.</li> <li>When monitoring the information which the monitor user is selecting and playing : This function is disabled.</li> </ul>
<b>Stop</b>	<ul style="list-style-type: none"> <li>When the files are selected in the library list : Stops the slide show.</li> <li>When monitoring information is being played from a schedule : Stops the slide show.</li> <li>When monitoring the information which the monitor user is selecting and playing : This function is disabled.</li> </ul>
<b>Full Screen</b>	<p>Enlarges/shrinks an image file to fit to the full screen. Double-click the screen to return to the original image size.</p>







7 Play Control Tool ▲Up



Controls for play, stop, next file, previous file, and volume when playing a movie or audio file.

---

 <b>Play / Pause</b>	<ul style="list-style-type: none"><li>• When the files are selected in the library list : Plays the audio/movie files registered with the library list.</li><li>• When monitoring information is being played from a schedule : Plays the audio/movie files registered with the schedule.</li><li>• When monitoring the information which the monitor user is selecting and playing : This function is disabled.</li></ul>
 <b>Stop</b>	<ul style="list-style-type: none"><li>• When the files are selected in the library list : Stops playing an audio/movie file.</li><li>• When monitoring information is being played from a schedule : This function is disabled.</li><li>• When monitoring the information which the monitor user is selecting and playing : This function is disabled.</li></ul>
 <b>Previous/Next</b>	<ul style="list-style-type: none"><li>• When the files are selected in the library list : Plays the previous/next file in the library list.</li><li>• When monitoring information is being played from a schedule : Plays the previous/next file in the schedule list.</li><li>• When monitoring the information which the monitor user is selecting and playing : This function is disabled.</li></ul>
 <b>first/last 5 seconds</b>	<ul style="list-style-type: none"><li>• When the files are selected in the library list : Plays the first/last 5 seconds of the file.</li><li>• When monitoring information is being played from a schedule : Plays the first/last 5 seconds of the file.</li><li>• When monitoring the information which the monitor user is selecting and playing : This function is disabled.</li></ul>

---

.....

## 8 Registering/Editing the Schedule

Allows you to register the files to be run on the monitor in advance.

### Schedule Register Menu

- **Library : Registering the schedule through the library**  
Among the files on the server PC, files that are added through the registration procedures in the library can be registered with the schedule.
  1. When selecting a file from among the files already registered, or selecting a random file from the schedule registration window, the file is selected as a schedule file through the library registration procedures.
  2. When selecting an image file for the schedule file, you can add background music from among the following music files. If a schedule file is not an image file, the add/delete button for the background music is not activated.
- **Storage (Local/USB) : Registering the Storage (Local/USB) File Schedule**  
You can select a file from among the local storage of the monitor, or from the USB connected to the monitor to register the selected file with the schedule.
  1. From the monitor list, select a monitor where the schedule is to be registered. The add/delete button of the schedule file is only activated when selecting a monitor that is currently connected to the server.
  2. You can add a file from the local storage device of the monitor, or from the USB connected to the monitor by pressing the add button. In this case, it will not go through the library registration procedures on the server.
  3. When selecting an image file for the schedule file, you can add background music. When a schedule file is not an image file, the add/delete button for the background music is not activated.
- **Input/Power : Registering the Input/Power Schedule**  
You can register the input source or Power Off for the monitor with the schedule.
  1. You can schedule a change of the output source or the power for the monitor.
  2. After selecting a monitor where the schedule is to be registered in the monitor list,

- select an input source or Power Off from the Input/Power Selection.
- 3. Set the schedule time and press the confirm button.  
It will change into the registered output source at the start of the schedule,  
and it will correctly return to the MagicNet Menu screen when the schedule is over.

1. **Selecting a Monitor**

Selecting either all monitors or a specific monitor, where the schedule will be added to, is available from among the monitors connected via the network.

2. **Schedule a File Add/Delete**

You can select, add or delete the file to be added to the schedule.

3. **Background Music Add/Delete**

Available only when using image files.

Selects an audio file to use as the background music in advance when playing an image file registered to the schedule.

4. **Schedule**

- o **Start Time**

This means the starting time of a schedule, which can be entered in years/months/days/hours/minutes.

It is possible to set the start time of a schedule within 7 days of the current day, however setting a time later than 7 days from now is not available.

- o **Total Run Time**

The total period of time reserved in the schedule

- o **Repeat Function**

- In repeating the schedule at an interval of a day/week/month, select the interval to be repeated and the date for completing the repeat. The end date of such a repetition can be set within 1 year of the current date.
- If you do not select the repeat option or do not select the end date of the repetition, the schedule will be added once by default.

5. **Options**

- o **Insert between Existing Schedules**

This means that a new schedule will be inserted without affecting the total playing time of the existing schedules. If a new schedule to be inserted, intrudes on the end time of an existing schedule, the start time selected by the user is ignored,

and the start time is changed to after the end time of the existing schedule. When the new schedule to be added intrudes on the start time of an existing schedule, the start time of the existing schedule is changed to after the end time of the new schedule.

- o **Ignore/Overwrite Existing Schedules**

Existing schedules are ignored, and a new user schedule overwrites at the required time. If the new schedule overlaps with an existing schedule, the time of the existing schedule can be changed or even be deleted, since it is overwritten by the new schedule.



9 Date ▲Up

Displays the registered schedules in the Fields window (11) whose date are later than today (9).



10 Monitors Connected via the Network ▲Up



Lists the names of monitors registered via the network.  
When a monitor is connected to the network, its background color changes to yellow-green.

- **Reconnect to another server automatically**

1. When selecting a monitor that is currently connected to a server in the monitor list and right-clicking it with the mouse, you can see an item titled 'Reconnect to another server automatically'.
2. When selecting 'Reconnect to another server automatically', the field in front of the menu item is marked, and will also be marked in the option Setup iæ Network Setup 'Reconnect to another server automatically' in the monitor.
3. Selecting this menu enables a monitor to search for another server and connect to a found server when the connection to the server with the name defined in the Setup is not available.  
Let's say there are two servers called S1 and S2, respectively, and a monitor called C, which is currently connected to the S1 server. When the connection to S1 fails or stops, C will automatically be connected to the S2 server.

- **Setting Up a User Password**

1. When selecting a monitor that is currently connected to a server in the monitor list and right-clicking it with the mouse, you will see an item titled 'Setting up a user's password'.
2. When selecting 'Setting up a user password', the field in front of the menu item is marked, and will also be marked in the option Setup iæ Network Setup 'Ask for user password' in the monitor.
3. This is to prevent a random user from using MagicNet indiscriminately.  
If you select this option, you will be required to enter your password to access the MagicNet menus (Network, Photo/Movie/Music/Office of device, etc.).

- **Update**

1. When selecting a monitor that is currently connected to a server in the monitor list and right-clicking it with the mouse, you can see an item titled 'Update' in the menu.  
This item enables you to update MagicNet (File name: NK.bin) on the monitor.
2. This item will be deactivated in monitors that are not connected to a server.
3. If you select the Update item, a window pops up. Search for the path to NK.bin, select it, and click the Update button.  
The update will proceed in two steps:  
Download (Save the update file in the monitor) iæ Update (MagicNet installation)
4. You may cancel this function during the download stage, but not during the update stage.
5. Once the update is completed, the monitor will reboot automatically.
6. If you try updating with an abnormal file, a warning message will appear, and the update will not proceed.
7. Please make sure that the power of the monitor is not turned off while updating once the download is over.  
Furthermore, if the output source is a PC, please turn off the 'monitor off' function in the power options of the connected PC for the duration of the update.  
MagicNet is not operating normally.  
If the power turns off during the update, contact our After-Sales Service Center.

- **Schedule Check**

1. **Select All Monitors:**  
Checks on all schedules of the registered monitors are available in the (⏻) field. Right-clicking the mouse can turn the power ON or OFF as well as deleting the field. In addition, you can change the name of the monitors.



**The server program's Power-On option works only if the monitor's power is completely shut off. Please make sure not to use the Power-On option when the monitor is in the process of shutting up since it can possibly cause systematic error on the monitor.**



2. **Select Monitor :**

The schedules of the relevant monitor is queued.

- **Rename**

Type a new name and click confirm. The new name will be saved.



**11** Fields Window ▲Up

Displays the status of a file.

- When selecting All Monitors in the Schedule, you can view all schedules registered for each monitor.
- Control the time by double-clicking on a schedule.
- When a monitor is selected in the monitor list. Displays the file name including the path, category, start time, end time and playtime.

1. When the All Monitors entry is clicked in the monitor list ( **8** ), schedules are not displayed in a list, but with images of a box type. The schedules for all monitors in the monitor list are displayed here. You can control the time by double clicking on a box type schedule, dragging and dropping a schedule to move it to a different position, and cut, delete and paste a schedule by using the menus displayed when the right mouse button is clicked.
2. When you click on a monitor in the monitor list ( **8** ), the schedules for that monitor are displayed in the list. Right-clicking on a schedule list displays a context menu, allowing you to copy, delete, or edit it. By using the Edit menu, you can change the selected file and time. By using the Copy menu, you can select a monitor to copy.
3. The files registered to the library are displayed in a list. Right-clicking a file in the list displays a menu, allowing you to view properties for a schedule and deleting a schedule, depending on the kind of menu. You can also directly insert the selected file into a schedule.



The specifications are subject to change without notice.  
MagicNet is a trademark of SAMSUNG ELECTRONICS CO., Inc.  
All other product trademarks mentioned in this document may be registered trademarks of their respective companies.

## MDC Adjustment

**Multiple Display Control (MDC)** is a function for easily controlling several monitors from a PC. MDC checks and controls the status of monitors that normally connect via the network.

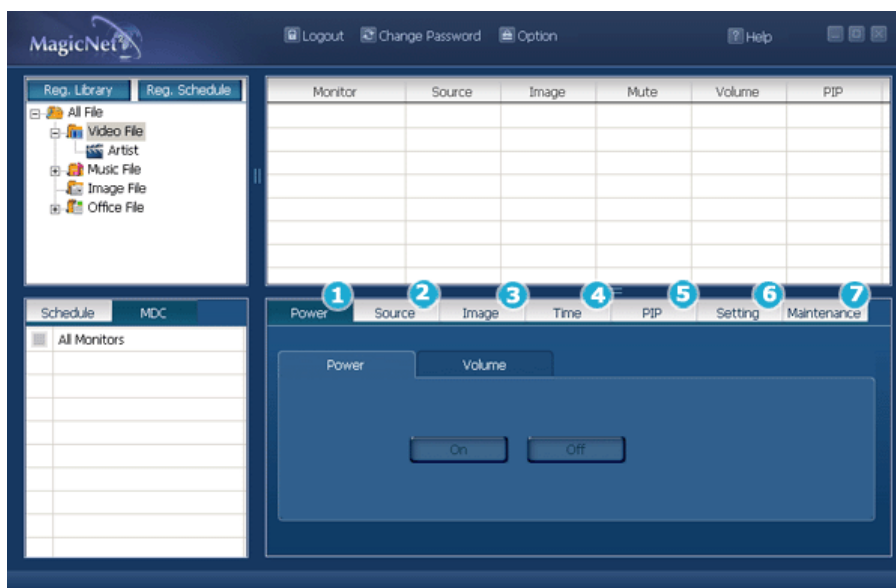
### How to Control

1. When selecting MDC from the monitor list window, the monitoring window and the schedule window change into a window showing the monitor status and the control window, respectively.
2. First, select the monitor to apply in the client list window.
3. If you choose All Monitors, all monitors will be selected.
4. If you try to run the detailed functions for each tab without first selecting a monitor, a warning message will appear.
5. After selecting a monitor, click each MDC tab to run the detailed functions. In this case, when running menus that cannot be adjusted in the output source, the warning 'Adjustment unavailable' will appear. Furthermore, when running adjustable menus, the selected values will be applied to the monitor, and the results will be applied to the MDC status window. If not applied to the monitor, it will also not be applied to the MDC status window.



**The MDC functions comply with the specifications for running the monitor.**

## MDC OSD



- 1 Power
- 2 Source
- 3 Image
- 4 Time

- 5 PIP
- 6 Settings
- 7 Maintenance



### 1 Power ▲Up

Select Power ON/OFF.

- ON
- OFF

When changing the volume, the changed details will appear in an OSD on the monitor screen.

- 0 ~ 100



### 2 Source ▲Up

In the source tab, the output source of the monitor can be changed.  
When selecting the following output source, it will change to the relevant output source.  
When the relevant device is not connected, a screen with 'Connection required' will appear.

- PC
- BNC
- DVI
- AV
- S-Video
- Component
- MagicNet



### 3 Image ▲Up

#### 1. Image Size

The size of the current output screen with output sources other than PC signals is adjustable.  
When selecting the menu below,  
it will be changed to the selected size.

- 16:9
- Panorama
- Zoom1
- Zoom2
- 4:3

#### 2. Image Size PC

Adjusts the output screen size of the PC signal.  
When trying to change the size of non-adjustable input sources, a warning message will appear on the monitor.

- 16:9

- 4:3



#### 4 Time ▲Up

##### 1. **Current Time**

Establishes the standard time of the monitor.  
In Hours, Minutes and AM/PM, select the time, and click the Apply button.  
The current standard time of the monitor will be set.  
To activate the On/Off Timer at the set time, the Current Time must be set.

- Hours
- Minutes
- AM/PM

##### 2. **On Timer**

Select the time, output source and volume, and click the Apply button. The monitor will turn on with the established source and volume at the established time.  
When Activated is OFF, the ON Timer will not work.

- Hours
- Minutes
- AM/PM
- Activated
- Source
- Volume

##### 3. **Off Timer**

Select the time and click the Apply button. The monitor will turn off at the set time.  
When Activated is OFF, the Off Timer will not work.

- Hours
- Minutes
- AM/PM
- Activated



#### 5 PIP ▲Up

##### 1. **Size**

Select a size. (The size selection has an 'ON' function)

##### 2. **Source**

When selecting sources to be output to PIP, the relevant source will be applied to PIP.  
When trying to change a source where PIP cannot be applied or the combination of Main/Sub is incompatible, a warning message will appear on the monitor.



#### 6 Settings ▲Up



#### 1. **Picture**

For input sources other than for PC signals, adjust the Contrast, Brightness, Sharpness, Color, Tint and Color Tone of the monitor.

- Contrast
- Brightness
- Sharpness
- Color
- Tint
- Color Tone

#### 2. **Picture PC**

When the output sources are PC signals, adjust the Contrast, Brightness, Sharpness, Color, Tint and Color Tone of the monitor.

- Contrast
- Brightness
- Red
- Green
- Blue

#### 3. **Audio**

Adjust the Bass, Treble and Balance, and set Main/Sub for the Sound Select of Dolby Virtual ON/OFF, BBE ON/OFF and PIP.  
In the course of making adjustments, changes appear as OSDs on the monitor screen.

- Bass
- Treble
- Balance
- Dolby Virtual
- BBE
- Sound Select

#### 4. **Adjust Image Lock**

Course, Fine, and select Position.

- Coarse
- Fine
- Position
- Auto Adjustment



### **7** Maintenance ▲ Up

#### 1. **Lamp Control**

You can control the intensity of the lamp.  
(Auto/Manual is available. When Auto is running, Manual is off; and when Manual is running, Auto is off.)  
In Auto mode, the lamp is adjusted to the previously set value at the set time.  
In Manual, the previous value is maintained.

- Auto
- Hours
- Minutes
- AM/PM
- Value
  
- Manual

#### 2. **Scroll**

This function prevents the screen status changing when the same screen is maintained continuously.  
If you select the Period and Time and press the Apply button, the screen will scroll downwards at the speed of the previously set time in Period.  
For example, for Period 1, Time 5, the screen will be renewed every hour at a speed of 5 seconds.

- Period
- Time

### 3. **Video Wall**

This offers a function that enables you to use several monitors as one screen.

First, select the button that sets the number of monitors to be used and their allocation. The allocation figure will appear as a selectable button on the side.

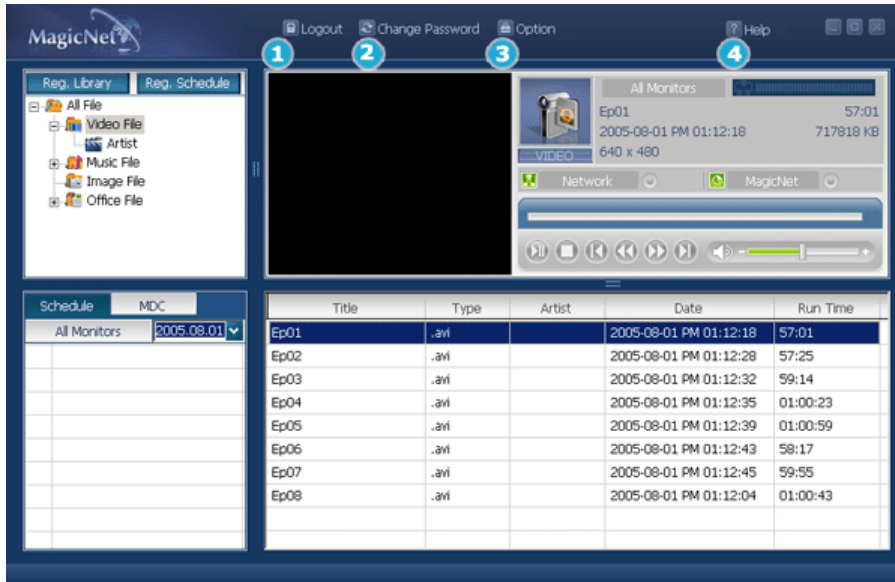
For example, when you choose 2\*2, selectable buttons in the form of 2 rows and 2 lines appear, and if you select number 3 in this matrix, the third screen of the output screen divided by 4 will show up in the monitor.

- 2\*2
  - 3\*3
  - 4\*4
  - 1\*5
  - 5\*1
  - OFF
- 
- Format



The specifications are subject to change without notice.  
MagicNet is a trademark of SAMSUNG ELECTRONICS CO., Inc.  
All other product trademarks mentioned in this document may be registered trademarks of their respective companies.

## Upper Menu



- ❶ Login / Logout
- ❷ Change Password
- ❸ Options
- ❹ Help

### ❶ Login / Logout

Before using MagicNet, you first need to login. After a successful login, the Login button changes to a Logout button. A successful login is required to use the majority of functions. When installing MagicNet for the first time, the administrator account is provided on the basis of the password entered by the user. When adding an account, you can select from among three account types, and the selected account type decides the scope of using MagicNet. You may modify or delete the accounts of existing users as well as adding new users.

Account Type	Scope
Administrator	You have the authority to use all MagicNet functions.
Power User	You are not authorized to use the Options menu and the Update function of MagicNet.
Operator	You are not authorized to use the right mouse button click in the Library Registration, Options menu, MDC and Monitor List from among the MagicNet functions.

- User Name
- Password



## 2 Change Password ▲Up

You can change your password in the login status. Enter your password correctly before logging in. You will be prompted to enter the password for installing MagicNet, and this password will become the default password for the administrator account. If you forget the password, please remove the program and re-install it.

- Old Password
- New Password
- Confirm Password



## 3 Options ▲Up

### 1. Server Name

In the Options, you can specify the server name for the connection information. The servers and monitors are connected via the network, and have proper names to identify each other. For a normal connection, the server name between a server and monitor must match. In other words, when the name of a server is MagicNet, only monitors whose server names are set to "MagicNet" can be connected to that server and receive the schedule. When there is no server with that name set in the monitor, it will wait until a server that matches this name appears. However, when the auto connection function is ON, it tries to connect to any server, and will connect to the server that replies first.

- Server Name

### 2. User Account

When installing MagicNet for the first time, the administrator account is provided on the basis of the password entered by the user.

When adding an account, select from among three account types, and the selected account type decides the scope of using MagicNet. You may modify or delete the accounts of existing users as well as adding new users.

Account Type	Scope
Administrator	You have the authority to use all functions of MagicNet.
Power User	You are not authorized to use the Options menu and the Update function from among the MagicNet functions
Operator	You are not authorized to use the right mouse button click in the Library Registration, Options menu, MDC and Monitor List from among the MagicNet functions.

- Create
- Modify
- Delete

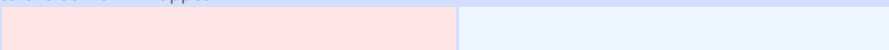
### 3. File Manager

File manager copies or deletes files.

Copying files can be done either from Server Folder ↔ Server Folder, Server ↔ Monitor, Monitor ↔ Monitor.

A copy from a monitor to another is available only on the same monitor (i.e. different hard drives on the same monitor).

In the Select Monitor list, only My Computer of the server and the monitor that is correctly connected to the server will appear.





Copy File	Delete File
<p>When selecting Options iæ File Manager, the File Management window appears. You can select a server/monitor from the select list. When selecting a monitor from the left window, you are only allowed to select the same monitor.</p> <p>After selecting the copy target, press the copy button. Copying the file will proceed. If the copy target is not a Photo/Music/Movie/Office file, an error message will appear, and copying will stop.</p> <p>In addition, when the file size exceeds the remaining capacity of the target drive, copying will also stop.</p>	<p>Select the file to be deleted using the same procedure as for copying a file, and click the delete button. The file will be completely deleted from the drive. (The list will be updated promptly).</p> <p>However, if you try to delete a file that is currently running, the error message "Unable to delete file" will appear.</p>

- Copy File
- Delete File



4 Help ▲Up

1. **Help**  
Runs program help.
2. **About MagicNet**  
Indicates the program version and the copyright details.



The specifications are subject to change without notice.  
 MagicNet is a trademark of SAMSUNG ELECTRONICS CO., Inc.  
 All other product trademarks mentioned in this document may be registered trademarks of their respective companies.

 Remote Control Adjustment

 PHOTO





**Supported File Formats**

 Image File : JPG, BMP

 Remote Control


- When the files are selected in the library list



-  Previous file
-  Stop slideshow / View the bottom menu bar
-  Slideshow
-  Next file

 MUSIC








**Supported File Formats**

 Music File : MP3

 Remote Control

- When the files are selected in the library list



-  File view on the cursor position / Play / Pause during playback
-  Stop playing
-  Play in 5 seconds
-  Play 5 seconds earlier
-  Move to the next file (when the cursor is placed at the top, it will go back to the last file of the previous page)
-  Move to the previous file (when the cursor is placed at the bottom, it will move to the first file of the next page)
-  Move to the next page (when the current page is the first, it will move to the last page)



Move to the previous page (when the current page is the last, it will move to the first page)



File view on the cursor position Play

## MOVIE

### Supported File Formats

Video File : MPEG1, MPEG2-PS, DIVX4, DIVX5

### Remote Control

- When the files are selected in the library list



Move to the top (when the cursor is placed at the top, it will go back to the last file of the previous page)



Move to the bottom (when the cursor is placed at the bottom, it will move to the first file of the next page)



Move to the next page (when the current page is the first, it will move to the last page)



Move to the previous page (when the current page is the last, it will move to the first page)



File view on the cursor position Play

- Play



Play / Pause during playback



Stop playing



Play 5 seconds earlier



Play in 5 seconds

## OFFICE

### Supported File Formats

Office File : Power MS Office(Word, Excel, Power Point), HTML, PDF

### Remote Control

- When the files are selected in the library list



Move to the top (when the cursor is placed at the top, it will go back to the last file of the previous page)



Move to the bottom (when the cursor is placed at the bottom, it will move to the first file of the next page)



Move to the next page (when the current page is the first, it will move to the last page)



Move to the previous page (when the current page is the last, it will move to the first page)



File view on the cursor position

---

• PDF



Move to the top



Move to the bottom



Move to the next page



Move to the previous page



Exit PDF

---

• Excel



Move to the upper cell



Move to the lower cell



Move to the left cell



Move to the right cell



Move to the next page



Move to the previous page



Move to the right sheet



Move to the left sheet



Exit Excel

---

• Power point Normal



Move to the top



Move to the previous page



Move to the next page



Move to the previous page



Slideshow



Exit Power point

• Power point Slideshow



Stop slideshow



Move to the top



Move to the bottom



Move to the next page



Move to the previous page



Exit Power point

• Word



Move to the top



Move to the bottom



Move to the next page



Move to the previous page



Exit Word

• HTML



Move to the top



Move to the bottom



Move to the next page



Move to the previous page



Exit HTML

• Ineternet



Move the mouse cursor up



Move the mouse cursor down



Move the mouse cursor to the left



Move the mouse cursor to the right



Click when the cursor is placed over a link (move to the link)



Exit the Internet



The specifications are subject to change without notice.  
MagicNet is a trademark of SAMSUNG ELECTRONICS CO., Inc.  
All other product trademarks mentioned in this document may be registered trademarks of their respective companies.

 **Removing Program**

**You can remove MagicNet** by using the Add/Remove Options in Windows Programs or by using the delete menu provided when installing this program.

**To remove MagicNet**, complete the following steps.

1. Select [**Start**]->[**Settings**]->[**Control Panel**].
2. For Windows XP, select [**Start**]->[**Control Panel**].
3. Double-click the [**Program Add/Remove**] icon in the Control Panel.
4. Click the MagicNet in the [**Program Add/Remove**] window to highlight it.
5. Click [**Change/Remove**] to remove it.
6. Click OK to start removal of MagicNet.
7. Wait until the window appears which indicates that program removal is completed.

 **Troubleshooting****? In Preview, the file information can be viewed but not the image**

Office files are not displayed. Check the file for the format.  
When there is no codec available for the server, no file is displayed. Check the codec first.  
MPEG2, DivX4,5 and AC3 are played normally only when the server has the corresponding codec available. Please install the corresponding codec.



Conflicts between codecs may occur when various kinds of codecs are installed on one PC, which results in a program error. And the incomplete installation of a codec may result in a program malfunction and file playback error.

**? In a Preview, the program does not operate**

When you play a movie or music file in Preview, the player does not operate and stops to check if the codec is available. Note that conflicts between codecs may occur when various kinds of codecs are installed on one PC, which results in a program error. And the incomplete installation of a codec may result in a program malfunction and file playback error.

**? When a schedule does not run properly at the designated time:**

Please check the status of MagicNet for the monitor and that of the network.  
Furthermore, please confirm if the schedule pause function is activated for the monitor. Schedules will only run when the status of MagicNet and the Network are ON, and will not run when the monitor schedule is paused.



When the power goes off and returns or the network is disconnected and re-connected, the current schedule returns to the start.

**? When the monitor icon is displayed in sky blue not green (normal operation):**

This may occur when the network configuration is normal but the connection between the server and the monitor is not functioning properly. This may occur when the monitor is connected to another server, not the corresponding one, or the network status is not normal.  
Please check the monitor for the network connection.

**? Password/Login**

The password entered by the user when installing MagicNet will become the default password of the administrator account.



If you forget your password, please remove the program and install it again.



## Specifications

### Supported File Format Spec

	File Format	Resolution	Bit rate		Audio
			CBR	VBR	Sampling rate
Video	MPEG1	720x480 or less	9Mbps or less	Peak bitrate 9Mbps or less	-
	MPEG2 (PS)				-
	DivX 4.x				-
	DivX 5.x				-
Audio	MP3	-	Available	Not Available	16kHz or more
Photo	JPEG	3500 x 2625 or less	-	-	-
	BMP		-	-	-

- ❗ For MPEG2, only PS (Program Stream) is supported and TS (Transport Stream) is not.
- ❗ For JPEG, the EXIF Format (Digital Camera) is not supported. (However, Samsung digital cameras are supported)

### Network Configuration (Number of Devices)

	Bit rate	Normal	Max
Video	4Mbps	10	20
	6Mbps	8	16
	9Mbps	5	9
Audio, Photo	-	20 or more	-

- ❗ Server PC Environment: Recommended (CPU: 3GHz, RAM:512M, Ethernet: 100M)
- ❗ Network Environment: Local network not connected externally
  - 🔧 Normal: Server PC network bandwidth: 50% ~ 60%
  - 🔧 Max: Server PC network bandwidth: 90% or more (not recommended)
- ❗ For a LAN-connected environment, the connectable number of devices may be reduced depending on the availability of neighboring networks.

### Server System Configuration

	CPU	RAM	Ethernet	OS	Application
Minimum	P1.8	256M	100M	Windows XP Windows 2000 (Service Pack 4)	WMP 9 or later
Recommended	P3.0Ghz	512M			


### Local Device (USB) Connection Speed

- 🔧 For a mass storage device such as a USB hard disk, it takes approximately 3 - 4 seconds for loading 1 GB.
- 🔧 When the user operates MagicNet while the file is loading, a warning message is displayed.

### Local Device (USB) compatibility

- 🔧 HID(Human Interface Devices)
  - : Keyboard, Mouse
- 🔧 MSC(Mass Storage Class)
  - : Devices using the SCSI(Small Computer System Interface) command set

: FAT(File Allocation Table) System

 Exception

: Some manufacturers have wrongly specified their device to be USB standard compatible.

Our product has exception handling procedures. But Some devices are unlikely to work properly.

: Some manufacturers have wrongly specified their device to be SCSI compatible.

Such devices are unlikely to work properly.

: It is recommended that USB devices are purchased after they are tested and confirmed to be compatible.



The specifications are subject to change without notice.  
MagicNet is a trademark of SAMSUNG ELECTRONICS CO., Inc.  
All other product trademarks mentioned in this document may be registered trademarks of their respective companies.



Self-Test Feature Check

Check List

Q & A

## Self-Test Feature Check



Check the following items yourself before calling for service. Contact the [Service Center](#) for problems that you cannot solve by yourself.

[Self-Test Feature Check](#) | [Not Optimum Mode](#) |

[Maintenance and Cleaning](#) | [Symptoms & Recommended Actions](#)

### 1. Self-Test Feature Check

Your monitor provides a self test feature that allows you to check whether your monitor is functioning properly.

1. Turn off both your computer and the monitor.
2. Unplug the video cable from the back of the computer.
3. Turn on the monitor.

The figure shown below ("Check Signal Cable") appears on a black background when the monitor is in its normal working condition though it does not sense any video signal: While in the Self-Test mode, the LED power indicator remains green and the figure moves around on the screen.

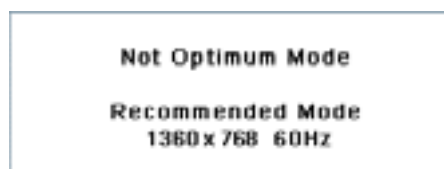


4. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after using the previous procedure, check your video controller and computer system; **your monitor is functioning properly.**

### 2. Not Optimum Mode

You can view the screen even in more than 1360x768 resolution. However you will have the following message for a minute; You can choose to change the screen resolution or stay in the current mode during that time. And if the resolution is more than 85Hz, you will see the black screen because the monitor does not support over 85Hz.





Refer to Specifications > [Preset Timing Modes](#) for the resolutions or frequencies that are supported by the monitor.

### 3. Maintenance and Cleaning

1. Maintaining the Monitor Case.  
Clean with a soft cloth after disconnecting the power cord.



- Do not use benzene, thinner or other flammable substances, or a wet cloth.
- We recommend a Samsung cleansing agent is used to prevent damage to the screen.

2. Maintaining the Flat Panel Display Screen.  
Clean with a soft cloth (cotton flannel) smoothly.



- Never use acetone, benzene or thinner. (They may cause flaws or deformation of the screen surface.)
- The user will be required to pay costs and related expenses for repair of damages caused by him/her.

### 4. Symptoms and Recommended Actions



A monitor recreates visual signals received from the computer. Therefore, if there is trouble with the computer or the video card, this can cause the monitor to become blank, have poor coloring, noise, Video mode not supported, etc. In this case, first check the source of the problem, and then contact a [Service Center](#) or [your dealer](#).

1. Check if the power cord and the video cables are properly connected to the computer.
2. Check if the computer beeps more than 3 times when booting.  
(If it does, request an after-service for the main board of the computer.)
3. If you installed a new video card or if you assembled the PC, check if you installed the adapter(video) driver and the monitor driver.
4. Check if the scanning ratio of the video screen is set at 50Hz or 85Hz.  
(Do not exceed 60Hz when using the maximum resolution.)
5. If you have problems in installing the adapter (video) driver, boot the computer in Safe Mode, remove the Display Adapter at the "**Control Panel, System, Device Administrator**" and then reboot the computer to reinstall the adapter (video) driver.

[Self Test Feature Check](#)

[Check List](#)

[Q & A](#)



#### Check List



The following table lists possible problems and their solutions. Before calling for service, check the information in this section to see if you can remedy any problems yourself. If you do need assistance, please call [the phone number on the Information section](#) or [contact your dealer](#).

[Problems related to Installation](#) | [Problems related to Screen](#) | [Problems related to Audio](#) | [Problems related to Remote Control](#)

#### 1. Problems related to Installation



Problems related to the monitor installation and their solutions are listed.

Problems	Solutions
The monitor screen flickers.	<ul style="list-style-type: none"> <li>• Check if the signal cable between the computer and the monitor is securely connected and tightened. (Refer to <a href="#">Connecting to a Computer</a>)</li> </ul>

#### 2. Problems related to Screen



Problems related to the monitor screen and their solutions are listed.

--	--

Problems	Solutions
Screen is blank and power indicator is off	<ul style="list-style-type: none"> <li>Ensure that the power cord is firmly connected and the LCD monitor is on. (Refer to the <a href="#">Connecting the Monitor</a>)</li> </ul>
"Check Signal Cable" message	<ul style="list-style-type: none"> <li>Ensure that the signal cable is firmly connected to the PC or video sources. (Refer to the <a href="#">Connecting the Monitor</a>)</li> <li>Ensure that the PC or video sources are turned on.</li> </ul>
"Not Optimum Mode " message	<ul style="list-style-type: none"> <li>Check the maximum resolution and the frequency of the video adapter.</li> <li>Compare these values with the data in the <a href="#">Preset Timing Modes Chart</a>.</li> </ul>
Picture rolls vertically.	<ul style="list-style-type: none"> <li>Check if the signal cable is securely connected. Connect it again securely. (Refer to <a href="#">Connecting to a Computer</a>)</li> </ul>
Image is not clear. Picture is blurred.	<ul style="list-style-type: none"> <li>Run Frequency <a href="#">Coarse</a> and <a href="#">Fine</a> tuning.</li> <li>Turn on again after removing all accessories (video extension cable, etc.)</li> <li>Set resolution and frequency to the recommended ranges.</li> </ul>
Picture image is unstable and vibrates.	<ul style="list-style-type: none"> <li>Check if the resolution and frequency set for the computer video card falls in the range supported by the monitor. If not, reset them referring to the current <a href="#">Information</a> under the monitor menu and <a href="#">Preset Timing Modes</a>.</li> </ul>
Ghost images are shown in the picture.	
The image is too light or too dark	<ul style="list-style-type: none"> <li>adjust the brightness and contrast. (Refer to the <a href="#">Brightness, Contrast</a>)</li> </ul>
Screen color is inconsistent.	<ul style="list-style-type: none"> <li>Adjust color using <a href="#">Custom</a> under OSD Color Adjustment menu.</li> </ul>
Color image is distorted with dark shadows.	
White color is poor.	
Power Indicator blinks green.	<ul style="list-style-type: none"> <li>The monitor is currently saving the changes made in settings to the OSD memory.</li> </ul>
Screen is blank and power indicator light is steady green or blinks every 0.5 or 1 seconds	<ul style="list-style-type: none"> <li>The monitor is using its power management system.</li> <li>Press a key on the keyboard.</li> </ul>
The screen is blank and is blinking.	<ul style="list-style-type: none"> <li>If you see the "TEST GOOD" message on the screen when you press the MENU button, check the cable connection between the monitor and the computer to ensure that the connector is properly connected.</li> </ul>

### 3. Problems related to Audio



Problems related to audio signals and their solutions are listed below.

Problems	Solutions
No sound	<ul style="list-style-type: none"> <li>Ensure that the audio cable is firmly connected to both the audio-in port on your monitor and the audio-out port on your sound card. (Refer to the <a href="#">Connecting the Monitor</a>)</li> <li>Check the volume level. (Refer to the <a href="#">Volume</a>)</li> </ul>
Sound level is too low.	<ul style="list-style-type: none"> <li>Check the volume level. (Refer to the <a href="#">Volume</a>)</li> <li>If the volume is still too low after turning the control to its maximum, check the volume control on the computer sound</li> </ul>

	card or software program.
<b>Sound is too high pitched or too low pitched</b>	<ul style="list-style-type: none"> <li>Adjust the <a href="#">Treble</a> and <a href="#">Bass</a> to appropriate level.</li> </ul>

#### 4. Problems related to Remote Control



Problems related to the remote control and their solutions are listed.

Problems	Items to check
<b>The remote control buttons do not respond.</b>	<ul style="list-style-type: none"> <li>Check the battery polarities (+/-).</li> <li>Check if the batteries have been exhausted.</li> <li>Check if the power is on.</li> <li>Check if the power cord is securely connected.</li> <li>Check if a special fluorescent or neon lamp is on in the vicinity.</li> </ul>

[Self Test Feature Check](#)

[Check List](#)

[Q & A](#)

#### Q & A

Question	Answer
<b>How can I change the frequency?</b>	<p>Frequency can be changed by reconfiguring the video card.</p> <p>Note that video card support can vary, depending on the version of the driver used. (Refer to the computer or the video card manual for details.)</p>
<b>How can I adjust the resolution?</b>	<ul style="list-style-type: none"> <li>Windows XP : Set the resolution at the Control Panel→Appearance and Themes→Display→Settings.</li> <li>Windows ME/2000 : Set the resolution at the Control Panel→Display→Settings. * Contact the video card manufacturer for details.</li> </ul>
<b>How can I set the Power Saving function?</b>	<ul style="list-style-type: none"> <li>Windows XP : Set the resolution at the Control Panel→Appearance and Themes→Display→Screen Saver . Set the function at BIOS-SETUP of the computer. (Refer to Windows/Computer Manual).</li> <li>Windows ME/2000 : Set the resolution at the Control Panel→Display→Screen Saver. Set the function at BIOS-SETUP of the computer. (Refer to Windows/Computer Manual).</li> </ul>
<b>How can I clean the outer case/LCD Panel?</b>	<p>Disconnect the power cord and then clean the monitor with a soft cloth, using either a cleaning solution or plain water.</p> <p>Do not leave any remains of the detergent nor scratch the case. Do not allow any water to go inside the monitor.</p>



General

PowerSaver

Preset Timing Modes

**General**

**General**

Model Name SyncMaster 460Pn

**LCD Panel**

Size 46" Diagonal

Display area 1018.353mm (H) x 572.544mm (V)

Pixel Pitch 0.7455mm (H) x 0.7455mm (V)

Type a-si TFT active matrix

**Synchronization**

Horizontal 30 ~ 70 kHz

Vertical 50 ~ 85 Hz

**Display Color**

16.7M Colors

**Resolution**

Optimum resolution 1360 x 768 / 1366 x 768 @ 60Hz depends on graphics card used

Maximum resolution 1360 x 768 @ 60Hz

**Input Signal, Terminated**

RGB Analog , DVI(Digital Visual Interface) Compliant Digital RGB.  
0.7Vp-p ±5%, Positive bright, 75 ohms ±10%(Terminated),  
Separate H/V sync, TTL level, positive or negative

**Maximum Pixel Clock**

100 MHz(Analog, Digital)

**Power Supply**

AC 100 ~ 240 VAC(+/- 10%), 60/50 Hz ± 3Hz

**Signal Cable**

15pin-to-15pin D-sub cable, detachable, 1.8m  
DVI-D to DVI-D connector, detachable, 2.0m

**Signal Connectors**

D-sub, BNC, DVI-D, YPbPr, S-VHS, VCR

### Power Consumption

Less than 310W

### Power Saving

Less than 5W

### Dimensions (WxHxD)/ Weight

1,102 X 658 X 126.5mm / 43.4 X 25.9 X 5.0 inch / 28kg

1,102 X 715 X 293mm / 43.4 X 28.1 X 11.5 inch (With Stand) - Option / 30kg

1,312 X 715 X 293mm / 51.7 X 28.1 X 11.5 inch (With Speaker, With Stand) - Option / 33kg

### VESA Mounting Interface

200mm x 200mm (for use with Specialty(Arm) Mounting hardware.)

### Environmental considerations

Operating Temperature: 50°F ~ 104°F (10°C ~ 40°C)  
Humidity: 10% ~ 80%, non-condensing

Storage Temperature: -4°F ~113°F (-20°C ~ 45°C)  
Humidity: 5% ~ 95%, non-condensing

### Audio Characteristics

Audio Input 1 RCA Jack Red(R) White(L), 0.5Vrms (-9dB)

Audio Input 2 RCA Jack Red(R) White(L), 0.5Vrms (-9dB)

PC Audio Input 3.5ØStereo Jack, 0.5Vrms (-9dB)

Frequency RF: 80Hz ~ 15kHz (at -3dB)

Response A/V: 80Hz ~ 20kHz (at -3dB)

### Plug and Play Capability

This monitor can be installed on any Plug & Play compatible system. Interaction of the monitor and computer systems will provide the best operating conditions and monitor settings. In most cases, monitor installation will proceed automatically, unless the user wishes to select alternate settings.

### Dot Acceptable

TFT LCD panel manufactured by using advanced semiconductor technology with precision of 1ppm(one millionth) above is used for this product. But the pixels of RED, GREEN, BLUE and WHITE color seem to be bright sometimes or some of black pixels could be seen. This is not from bad quality and you can use it without uneasiness.

- For example, the number of TFT LCD sub pixels that is contained in this product are 3,133,440.



**Design and specifications are subject to change without prior notice.**

### MagicNet - Client

Item	Specification	Remarks
LAN	100Mbps	
USB	Keyboard/Mouse, Mass Storage Device Compatible	USB-applied removable storage can be supported. Supporting file system is the only FAT , other file systems including NTFS are not supported from MagicNet.
SPDIF out	PCM Audio out	16kHz or more
Photo	Supported File Format : BMP/JPEG	3500x2625 or less
Music	Supported File Format : MP3	Sound bandwidth : 50Hz to 15kHz
Contents	Movie <ul style="list-style-type: none"><li>• MPEG1, MPEG2(PS), DivX 4.x, DivX 5.x</li><li>• Max 720 X 480 30 fps</li></ul>	MPEG2(MP@ML) DivX 4.x, DivX 5.x
	File	MS Office(Word, Excel, Power Point), HTML, PDF



Internet Browser	MS Internet Explorer	Not Support Flash, Java Applet, Security Site
Language	English	
OS	Windows CE 5.0	

### MagicNet - Server Requirement

	CPU	RAM	Ethernet	OS	Application
<b>Minimum</b>	P1.8Ghz	256M	100M	Windows XP	WMP 9 or later
<b>Recommended</b>	P3.0Ghz	512M			

General
PowerSaver
Presets Timing Modes

### PowerSaver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain amount of time. The monitor automatically returns to normal operation when you press a key on the keyboard. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The PowerSaver system operates with a VESA DPMS compliant video card installed in your computer. Use a software utility installed on your computer to set up this feature.

State	Normal Operation	Power saving mode EPA	Power off (Power Switch)	Power off (Mechanical Power S/W)
Power Indicator	Green	Green, Blinking	Black	Black
Power Consumption	Less than 310W	Less than 5W (Off-mode)	Less than 1W (at 120Vac)	Less than 0W
Option : SPEAKER L/R(8Ω, 10W), USB Device(Max, 5W is allowed)				

General
PowerSaver
Presets Timing Modes

### Preset Timing Modes

If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and adjust the screen as follows.

**Table 1. Preset Timing Modes**

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	49.500	+/+
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	43.269	85.008	36.000	-/-
VESA, 800 x 600	35.156	56.250	36.000	+,-/+,-

VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x600	46.875	75.000	49.500	+/+
VESA, 800 x600	53.674	85.000	56.250	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1024 x 768	68.677	85.997	94.500	+/+
VESA, 1280 x 768	47.776	60.000	79.500	-/+
VESA, 1360 x 768	47.712	60.000	85.500	+/+

#### Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle and the inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz



#### Vertical Frequency

Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called Vertical Frequency or Refresh Rate. Unit: Hz



- Safety Instructions
- Introduction
- Setup
- Adjusting Your Monitor
- Troubleshooting
- Specifications
- Information

General

PowerSaver

Preset Timing Modes

**General**

**General**

Model Name SyncMaster 460P

**LCD Panel**

Size 46" Diagonal

Display area 1018.353mm (H) x 572.544mm (V)

Pixel Pitch 0.7455mm (H) x 0.7455mm (V)

Type a-si TFT active matrix

**Synchronization**

Horizontal 30 ~ 70 kHz

Vertical 50 ~ 85 Hz

**Display Color**

16.7M Colors

**Resolution**

Optimum resolution 1360 x 768 / 1366 x 768 @ 60Hz depends on graphics card used

Maximum resolution 1360 x 768 @ 60Hz

**Input Signal, Terminated**

RGB Analog, DVI(Digital Visual Interface) Compliant Digital RGB.  
0.7Vp-p ±5%, Positive bright, 75 ohms ±10%(Terminated),  
Separate H/V sync, TTL level, positive or negative

**Maximum Pixel Clock**

100 MHz(Analog, Digital)

**Power Supply**

AC 100 ~ 240 VAC(+/- 10%), 60/50 Hz ± 3Hz

**Signal Cable**

15pin-to-15pin D-sub cable, detachable, 1.8m  
DVI-D to DVI-D connector, detachable, 2.0m

**Signal Connectors**

D-sub, BNC, DVI-D, YPbPr, S-VHS, VCR

## Power Consumption

Less than 300W

## Power Saving

Less than 5W

## Dimensions (WxHxD)/ Weight

1,102 X 658 X 126.5mm / 43.4 X 25.9 X 5.0 inch / 28kg

1,102 X 715 X 293mm / 43.4 X 28.1 X 11.5 inch (With Stand) - Option / 30kg

1,312 X 715 X 293mm / 51.7 X 28.1 X 11.5 inch (With Speaker, With Stand) - Option / 33kg

## VESA Mounting Interface

200mm x 200mm (for use with Specialty(Arm) Mounting hardware.)

## Environmental considerations

Operating Temperature: 50°F ~ 104°F (10°C ~ 40°C)  
Humidity: 10% ~ 80%, non-condensing

Storage Temperature: -4°F ~ 113°F (-20°C ~ 45°C)  
Humidity: 5% ~ 95%, non-condensing

## Audio Characteristics

Audio Input 1 RCA Jack Red(R) White(L), 0.5Vrms (-9dB)

Audio Input 2 RCA Jack Red(R) White(L), 0.5Vrms (-9dB)

PC Audio Input 3.5ØStereo Jack, 0.5Vrms (-9dB)

Frequency RF: 80Hz ~ 15kHz (at -3dB)

Response A/V: 80Hz ~ 20kHz (at -3dB)

## Plug and Play Capability

This monitor can be installed on any Plug & Play compatible system. Interaction of the monitor and computer systems will provide the best operating conditions and monitor settings. In most cases, monitor installation will proceed automatically, unless the user wishes to select alternate settings.

## Dot Acceptable

TFT LCD panel manufactured by using advanced semiconductor technology with precision of 1ppm(one millionth) above is used for this product. But the pixels of RED, GREEN, BLUE and WHITE color seem to be bright sometimes or some of black pixels could be seen. This is not from bad quality and you can use it without uneasiness.

- For example, the number of TFT LCD sub pixels that is contained in this product are 3,133,440.



**Design and specifications are subject to change without prior notice.**

General

PowerSaver

Preset Timing Modes



## PowerSaver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain amount of time. The monitor automatically returns to normal operation when you press a key on the keyboard. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The PowerSaver system operates with a VESA DPMS compliant video card installed in your computer. Use a software utility installed on your computer to set up this feature.

State	Normal Operation	Power saving mode EPA	Power off (Power Switch)	Power off (Mechanical Power S/W)
Power Indicator	Green	Green, Blinking	Black	Black
Power Consumption	Less than 300W	Less than 5W (Off-mode)	Less than 1W (at 120Vac)	Less than 0W

## Preset Timing Modes

If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and adjust the screen as follows.

**Table 1. Preset Timing Modes**

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	49.500	+/+
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	43.269	85.008	36.000	-/-
VESA, 800 x 600	35.156	56.250	36.000	+,-/+,-
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x600	46.875	75.000	49.500	+/+
VESA, 800 x600	53.674	85.000	56.250	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1024 x 768	68.677	85.997	94.500	+/+
VESA, 1280 x 768	47.776	60.000	79.500	-/+
VESA, 1360 x 768	47.712	60.000	85.500	+/+

### Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle and the inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz



### Vertical Frequency

Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called Vertical Frequency or Refresh Rate. Unit: Hz



[Service](#)   [Terms](#)   [For Better Display](#)   [Authority](#)   [Image Retention Free](#)   [Correct Disposal](#)

## Service

The address and phone number of the company can be changed without previous notice.

- AUSTRALIA :**  
Samsung Electronics Australia Pty Ltd.  
Customer Response Centre  
7 Parkview Drive, Homebush Bay NSW 2127  
Tel : 1300 362 603  
<http://www.samsung.com.au/>
  
- BRAZIL :**  
Samsung Eletronica da Amazonia Ltda.  
R. Prof. Manoelito de Ornellas, 303, Terro B  
Chacara Sto. Antonio, CEP : 04719-040  
Sao Paulo, SP  
SAC : 0800 124 421  
<http://www.samsung.com.br/>
  
- CANADA :**  
Samsung Electronics Canada Inc.  
Samsung Customer Care  
55 Standish Court  
Mississauga, Ontario  
L5R 4B2  
1-800-SAMSUNG (1-800-726-7864)  
<http://www.samsung.ca/>
  
- CHILE :**  
SONDA S.A.  
Teatinos 550, Santiago Centro, Santiago, Chile  
Fono: 56-2-5605000 Fax: 56-2-5605353  
56-2-800200211  
<http://www.sonda.com/>  
<http://www.samsung.cl/>
  
- COLOMBIA :**  
Samsung Electronics Colombia  
Cra 9 No 99A-02 Of. 106  
Bogota, Colombia  
Tel.: 9-800-112-112  
Fax: (571) 618 - 2068  
<http://www.samsung-latin.com/>  
e-mail : [soporte@samsung-latin.com](mailto:soporte@samsung-latin.com)
  
- ESPAÑA :**  
Samsung Electronics Comercial Iberica, S.A.

Ciencias, 55-65 (Poligono Pedrosa) 08908  
Hospitalet de Llobregat (Barcelona)  
Tel. : (93) 261 67 00  
Fax. : (93) 261 67 50  
<http://samsung.es/>

**FRANCE :**  
SAMSUNG ELECTRONICS FRANCE Service  
Paris Nord 2  
66 rue des Vanesses  
BP 50116 Villepinte  
95950 Roissy CDG Cedex  
Tel : 08 25 08 65 65  
Fax : 01 48 63 06 38  
<http://www.samsungservices.com/>

**GERMANY :**  
TELEPLAN Rhein-Main GmbH  
Feldstr. 16  
64331 Weiterstadt  
T. 06151/957-1306  
F. 06151/957-1732  
\* EURO 0.12/Min  
<http://www.samsung.de/>

**HUNGARY :**  
Samsung Electronics Magyar Rt.  
1039, Budapest, Lehel u. 15-17.  
Tel: 36 1 453 1100  
Fax: 36 1 453 1101  
<http://www.samsung.hu/>

**ITALY :**  
Samsung Electronics Italia S.p.a.  
Via C. Donat Cattin, 5  
20063 Cernusco s/Naviglio (MI)  
Servizio Clienti: 199.153.153  
<http://www.samsung-italia.com/>

**MÉXICO :**  
SAMSUNG ELECTRONICS MÉXICO. S.A. de C.V.  
Vía Lopez Portillo No. 6, Col. San Fco. Chilpan  
Tultitlán, Estado de México, C.P. 54940  
Tel: 01-55-5747-5100 / 01-800-726-7864  
Fax: 01-55-5747-5202 / 01-800-849-1743  
RFC: SEM950215S98  
<http://www.samsung.com.mx/>

IMPORTADO POR: SAMSUNG ELECTRONICS MÉXICO. S.A. de C.V.  
Vía Lopez Portillo No. 6, Col. San Fco. Chilpan  
Tultitlán, Estado de México, C.P. 54940  
Tel: 01-55-5747-5100 / 01-800-726-7864

EXPORTADO POR: Samsung Electronics CO.,LTD.  
416, Mae tan-3dong, Yeongtong - gu,  
Suwon City, Gyeonggi-do Korea

**NETHERLANDS/BELGIUM/LUXEMBOURG :**  
Samsung Electronics Benelux B. V.  
Fleminglaan 12 2289 CP Rijiswijk, NEDERLANDS  
Service and informatielijn ;  
Belgium :0800-95214, <http://www.samsung.be/>  
Netherlands : 0800-2295214, <http://www.samsung.nl/>

**PANAMA :**  
Samsung Electronics Latinoamerica( Z.L.) S.A.  
Calle 50 Edificio Plaza Credicorp, Planta Baja  
Panama  
Tel. : (507) 210-1122, 210-1133  
Tel : 800-3278(FAST)  
<http://www.samsung-latin.com/>

- **PERU :**  
Servicio Integral Samsung  
Av.Argentina 1790 Lima1. Peru  
Tel: 51-1-336-8686  
Fax: 51-1-336-8551  
<http://www.samsungperu.com/>
  
- **PORTUGAL :**  
SAMSUNG ELECTRONICA PORTUGUESA S.A.  
Rua Mário Dioniso, Nº2 - 1º Drt. 2795-140 LINDA-A-VELHA  
Tel. 214 148 114/100 Fax. 214 148 133/128  
Free Line 800 220 120  
<http://www.samsung.pt/>
  
- **SOUTH AFRICA :**  
Samsung Electronics,5 Libertas Road, Somerset Office Park,  
Bryanston Ext 16. Po Box 70006, Bryanston,2021, South Africa  
Tel : 0027-11-549-1621  
Fax : 0027-11-549-1629  
<http://www.samsung.co.za/>
  
- **SWEDEN/DENMARK/NORWAY/FINLAND :**  
Samsung Electronics Nordic AB  
Samsung support Sweden: 08-585 36787  
Samsung support Danmark : 38 322 887  
Samsung support Norway: 231 62722  
Samsung support Finland: 09-69379 554  
  
<http://www.samsung.se>  
<http://www.samsung.dk>  
<http://www.samsung.no>  
<http://www.samsung.fi>
  
- **THAILAND :**  
HAI SAMSUNG Service Center  
MPA COMPLEX BUILDING,1st-2nd Floor  
175 SOI SUEKSA VIDHAYA SATHON SOI 12  
SILOM ROAD ,SILOM,BANGRAK  
BANGKOK 10500  
TEL : 0-2635-2567  
FAX : 0-2635-2556
  
- **UKRAINE :**  
SAMSUNG ELECTRONICS REPRESENTATIVE OFFICE IN UKRAINE  
4 Glybochitska str.  
Kiev, Ukraine  
Tel. 8-044-4906878  
Fax 8-044-4906887  
Toll-free 8-800-502-0000  
<http://www.samsung.com.ua/>
  
- **United Kingdom :**  
Samsung Electronics (UK) Ltd.  
Samsung House, 225 Hook Rise South  
Surbiton, Surrey KT6 7LD  
Tel. : (0208) 391 0168  
Fax. : (0208) 397 9949  
< European Service Center & National Service >  
Stafford Park 12 Telford, Shropshire, TF3 3BJ  
Tel. : (0870) 242 0303  
Fax. : (01952) 292 033  
<http://samsungservice.co.uk/>
  
- **U.S.A :**  
Samsung Electronics America  
Service Division  
400 Valley Road, Suite 201  
Mount Arlington, NJ 07856  
1-800-SAMSUNG (1-800-726-7864)  
<http://samsung.com/monitor/>



## Terms

### Sync Signal

Sync (Synchronized) Signals refer to the standard signals that are required to display desired colors on the monitor. They are divided into Vertical and Horizontal Sync Signals. These signals display normal color images by the set resolution and frequency.

#### Types of Sync Signals

Separate	This is a scheme of transmitting individual vertical sync signals to the monitor.
Composite	This is a scheme of combining vertical sync signals into one composite signal and transmitting it to the monitor. The monitor displays the color signals by separating the composite signal into original color signals.

### Dot Pitch

The image on a monitor is composed of red, green and blue dots. The closer the dots, the higher the resolution. The distance between two dots of the same color is called the 'Dot Pitch'. Unit: mm

### Vertical Frequency

The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called Vertical Frequency or Refresh Rate. Unit: Hz

Example: If the same light repeats itself 60 times per second, this is regarded as 60 Hz.

### Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz

### Interlace and Non-Interlace Methods

Showing the horizontal lines of the screen from the top to the bottom in order is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same as that used in TVs.

### Plug & Play

This is a function that provides the best quality screen for the user by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard VESA DDC for the Plug & Play function.

### Resolution

The number of horizontal and vertical dots used to compose the screen image is called 'resolution'. This number shows the accuracy of the display. High resolution is good for performing multiple tasks as more image information can be shown on the screen.

Example: If the resolution is 1360 X 768 , this means the screen is composed of 1360 horizontal dots (horizontal resolution) and 768 vertical lines (vertical resolution).

### Multiple Display Control (MDC)

A Multiple Display Control (MDC) is an application allowing various displays to be easily and simultaneously operated on a PC. RS-232C, a standard of serial communication, is used for the communication between a PC and a display.

## For Better Display

1. Adjust computer resolution and screen injection rate (refresh rate) on computer as described below to enjoy the best quality of picture. You can have an uneven quality of picture in the screen if the best quality of picture is not provided in TFT-LCD.
  - o Resolution: 1360 x 768

- Vertical frequency (refresh rate): 60 Hz
- 2. TFT LCD panel manufactured by using advanced semiconductor technology with precision of 1ppm (one millionth) above is used for this product. But the pixels of RED, GREEN, BLUE and WHITE color seem to be bright sometimes or some of black pixels could be seen. This is not from bad quality and you can use it without uneasiness.
  - For example, the number of TFT LCD sub pixels that is contained in this product are 3,133,440
- 3. When you clean the monitor and the panel outside, please apply the recommended small amount of cleaner by using soft and dry cloth and polish it. Let LCD area not to be forced but to be scrubbed out softly.  
If excessive force is applied, you can have a stain on it.
- 4. If you are not satisfied with the quality of picture, you can get better quality of picture by executing "auto adjustment function" in display screen that is appeared as window termination button is pressed.  
If there's still noise after automatic adjustment, use FINE/COARSE adjustment function.
- 5. If you view a fixed screen for an extended period of time, residual image or blurriness may appear. Change the mode to energy save or set a screensaver to moving picture when you need to be away from the monitor for an extended period of time.

---

[Service](#)   [Terms](#)   [For Better Display](#)   **[Authority](#)**   [Image Retention Free](#)   [Correct Disposal](#)

## **Authority**

**Information in this document is subject to change without notice.**  
**© 2005 Samsung Electronics Co., Ltd. All rights reserved.**

Reproduction in any manner whatsoever without the written permission of Samsung Electronics Co., Ltd. is strictly forbidden.

Samsung Electronics Co., Ltd. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

*Samsung* is the registered trademark of Samsung Electronics Co., Ltd.; *Microsoft*, *Windows* and *Windows NT* are registered trademarks of Microsoft Corporation; *VESA*, *DPMS* and *DDC* are registered trademarks of Video Electronics Standard Association; All other product names mentioned herein may be the trademarks or registered trademarks of their respective owners.

## **Class B**

This device is a Class B digital apparatus. For Safety and EMC compliance guide, you may refer to "Regulatory" Guide.



Manufactured under license from Dolby Laboratories™. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.



BBE High Definition Sound is the core sound enhancement technology licensed by BBE Sound and featured in the BBE Sonic Maximizer range of professional audio signal processors.

## PRODUCT INFORMATION (Image Retention Free)

LCD Monitors and TVs may have image retention when switching from one image to another especially after displaying a stationary image for a long time. This guide is to demonstrate correct usage of LCD products in order to protect them from Image retention.

### What is Image retention ?

During normal operation of a LCD panel, pixel image retention doesn't occur. However, if the same image is displayed for a long time, a slight difference in electric charge accumulates between the two electrodes which encase the liquid crystal. This may cause the liquid crystal to build up in a certain areas of the display. Thus, the previous image is retained when switching to a new video image. All display products, including LCD, are subject to image retention. This is not a product defect.

Please follow the suggestions below to protect your LCD from image retention

#### Power Off, Screen Saver, or Power Save Mode

Ex)

- Turn the power off when using a stationary pattern.
  - Turn the power off for 4 hours after 24 hours in use
  - Turn the power off for 2 hours after 12 hours in use
- Use a Screen saver if possible
  - Screen saver in one color or a moving image is recommended.
- Set the Monitor to power off with the PC Display Properties Power Scheme.

#### Suggestions for specific applications

Ex) Airports, Transit Stations, Stock Markets, Banks, and Controlling Systems  
We recommend that you follow set up of your display system program as below:

#### Display Information together with Logo or Moving image cycle.

Ex) Cycle : Display Information for 1 hour followed by a Display Logo or moving image for 1 minute.

#### Change the Color Information periodically (Use 2 different colors).

Ex) Rotate the Color Information with 2 colors every 30 minutes.



Avoid using a combination of characters and background color with large difference in luminance.

Avoid using Grey colors, which can cause Image retention easily.

- Avoid: Colors with big difference in luminance (Black & White, Grey)

Ex)



- Recommended settings: Bright colors with little difference in luminance

- Change the characters color and background color every 30 minutes

Ex)



- Every 30 minutes, change the characters with movement.

Ex)

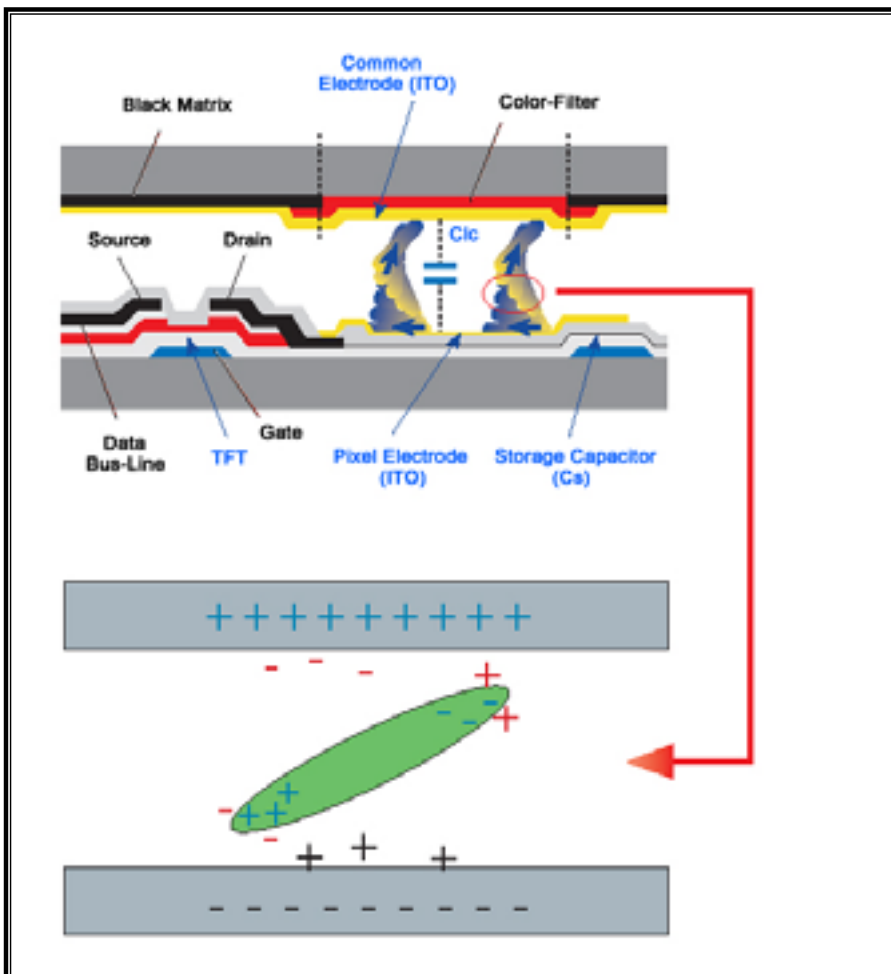


- ☛ **The best way to protect your monitor from Image retention is to set your PC or System to operate a Screen Saver program when you are not using it.**

Image retention may not occur when a LCD panel is operated under normal conditions.

Normal conditions are defined as continuously changing video patterns. When the LCD panel is operated for a long time with a fixed pattern (-over 12 hours-), there may be slight difference in voltage between electrodes that work the liquid crystal (LC) in a pixel. The voltage difference between electrodes increases with time, forcing the liquid crystal to lean. When this occurs, the previous image may be seen when the pattern is changed.

To prevent this, the accumulated voltage difference must be decreased.



- ☛ Our LCD Monitor satisfies ISO13406-2 Pixel fault Class II

## Correct Disposal of This Product (Waste Electrical & Electronic Equipment) - Europe only

---



**(Applicable in the European Union and other European countries with separate collection systems)**

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.